



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

LONGMANS' "SHIP" SERIES

EducT
20249
02.691

THE PICTORIAL
GEOGRAPHICAL
READERS
—
ASIA



Edue T 20249.02.691



Harvard College Library
THE GIFT OF
GINN AND COMPANY





3 2044 102 874 500



**AN ENTIRELY NEW SERIES SPECIALLY ADAPTED
TO THE NEW CODE.**

Geography Taught by Readers and Object Lessons.

**LONGMANS' PICTORIAL GEOGRAPHICAL READERS
FOR BOYS AND GIRLS.**

- BOOK I. FORTY-THREE READING LESSONS ON EASY** s. d.
GEOGRAPHICAL SUBJECTS IN PROSE AND POETRY, with Spelling
Lessons. 8 Full-page Illustrations printed in Colours. 60 Illustrations in Black and White. A Summary of a Year's Work in Geography. Crown 8vo. 148 pp. very strongly bound 1 0
- BOOK II. FORTY-TWO READING LESSONS IN PROSE AND**
POETRY, with Spelling Lessons. 8 Full-page Illustrations printed in Colours. 73 Illustrations in Black and White. A Summary of a Year's Work in Geography. Crown 8vo. 144 pp. very strongly bound 1 0
- BOOK III. FIFTY-ONE READING LESSONS ON ENGLAND**
AND WALES, with Selections of Poetry and Spelling Lessons. 15 Full-page Illustrations and Maps printed in Colours. 65 Illustrations in Black and White. Physical, Political, and Relief Maps. A Summary of the Lessons giving a Year's Work in Geography. Crown 8vo. 208 pp. strongly bound 1 6
- BOOK IV. BRITISH ISLES. FORTY-FOUR READING LESSONS.**
82 Illustrations and 49 Physical, Political and Relief Maps and Diagrams. A Summary of the Lessons giving a Year's Work in the Geography of the British Isles. With Maps printed in Colours. Crown 8vo. 224 pp. strongly bound 1 6
- BOOK IV. (ALTERNATIVE).—FIFTY-FOUR READING LESSONS**
IN PROSE AND POETRY. For use in Schools where the teaching of Geography is begun in Standard IV. 8 Full-page Illustrations printed in Colours. 66 Illustrations in Black and White. 23 Plans, and Physical, Political and Relief Maps. A Summary of the Lessons giving a Year's Work in Geography. Crown 8vo. 208 pp. strongly bound 1 6

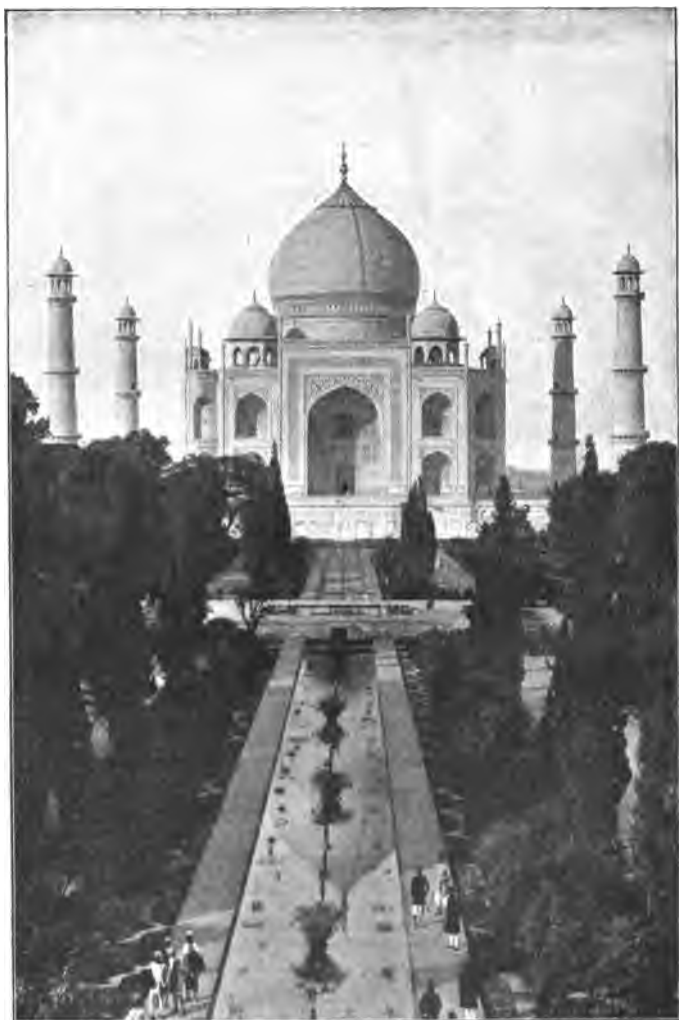
THE CONTINENTS.

- EUROPE.—FORTY-SEVEN READING LESSONS.** 52 Illustrations. 26 Physical, Political and Relief Maps. A Summary of the Lessons giving a Year's Work in Geography, with Maps printed in Colours. Crown 8vo. 224 pp. strongly bound 1 6
- AFRICA AND AUSTRALASIA.—FIFTY-THREE READING**
LESSONS. 81 Illustrations. 26 Physical, Political, and Relief Maps. A Summary of the Lessons giving a Year's Work in Geography, with Maps printed in Colours. Crown 8vo. 256 pp. strongly bound 1 8
- AMERICA.—FIFTY-SEVEN READING LESSONS.** 64 Illustrations. A Summary of the Lessons giving a Year's Work in Geography, with Maps printed in Colours. 17 Physical, Political, and Relief Maps. Crown 8vo. 232 pp. strongly bound 1 8
- ASIA.—FIFTY-FIVE READING LESSONS.** 77 Illustrations. A Summary of the Lessons giving a Year's Work in Geography. With 8 Maps printed in Colours. 7 Physical, Political and Relief Maps, and 12 Diagrams. Crown 8vo. 256 pp. strongly bound 1 8

OBJECT LESSONS IN GEOGRAPHY.

For a List of Books of Object Lessons see Messrs. LONGMANS' Catalogue of Books for Elementary Schools.

LONGMANS, GREEN, & CO. 39 Paternoster Row, London
New York and Bombay.



THE TAJ MAHAL, AGRA

See p. 118

Longmans' Ship Series

PICTORIAL
GEOGRAPHICAL READERS.

ASIA



LONGMANS, GREEN, AND CO.

89 PATERNOSTER ROW, LONDON

NEW YORK AND BOMBAY

1902

All rights reserved

Edw T 249.02.530

Edw T

20249.02.691

HARVARD COLLEGE LIBRARY

GIFT OF

GINN & COMPANY

MARCH 17, 1927

CONTENTS

LESSON	PAGE	LESSON	PAGE
1. Introductory	5	29. Indian Cities. III.—Bombay	109
2. The Lowlands of Asia	9	30. Indian Cities. IV.—Delhi, Agra, Haidarabad	114
3. The Highlands of Asia, the Pamir, and the Himalayas	12	31. Scenes of Native Life (I)	123
4. The Tibetan Plateau, the Han-hai and its Borders	18	32. Scenes of Native Life (II)	127
5. The Iranian Tableland	23	33. Scenes in Ceylon (I)	131
6. The Tablelands of Asia Minor and Arabia	29	34. Scenes in Ceylon (II)	136
7. The Climate of Asia, the Northern Plain and the Central Highlands	31	35. The Products of Ceylon	140
8. The Rainfall and the Southern Zone	35	36. Indo-China: People and Products	144
9. Siberian Rivers—The Ob and Yenisei—and Lake Baikal	38	37. Indo-China, its Elephants, Pagodas, and Priests	148
10. The Lena and the Amur, Hunting and Fishing	40	38. Asiatic Russia	151
11. Two Great Chinese Rivers	44	39. Siberia: People, Industries, and Dwellings	153
12. The Cities of the Yang-tse-kiang Basin	46	40. A Walk through Bokhara	157
13. Three Rivers of Indo-China	50	41. The Turkomans and the Kirghiz	163
14. Three Great Indian Rivers	52	42. Caucasasia: the Oil Wells of Baku	167
15. The Rivers of the Deccan, and the Euphrates and Tigris	57	43. China: the Occupations of the People	170
16. Irrigation by Canals	60	44. Chinese Dress and a Chinese Dinner	172
17. Irrigation by Kanats, Tanks, and Wells	63	45. Learning and Religion: the Great Wall	176
18. Plants and Animals of the Plains and the Tablelands	65	46. Chinese Towns: Peking and Canton	180
19. The Plants and Animals of the Monsoon District	69	47. Winter Traffic in Manchuria	187
20. The Yellow Race and the White Race	72	48. The People of Tibet	190
21. New Highways in Asia	75	49. The Koreans	195
22. India: Position and Inhabitants	81	50. Japan	197
23. Plant Life in India	84	51. A Walk through a Japanese Town	201
24. Animal Life in India	88	52. A Country Ride and a Japanese Inn	205
25. An Indian Town	91	53. The Malay Archipelago: Products and People	209
26. The Jungle and the Village	94	54. The Traffic and Towns of Irania	214
27. Indian Cities. I.—Calcutta	97	55. The Holy Land and Arabia	219
28. Indian Cities. II.—Jaipur	104	Appendix	225
		Pronunciation of Geographical Names	256

LONGMANS' 'SHIP' SERIES

PICTORIAL GEOGRAPHICAL READERS

ASIA

LESSON 1

INTRODUCTORY

IF we look at the map of the Eastern Hemisphere we shall see that two stretches of water, the Mediterranean and the Red Seas, penetrate for a great distance into the land, and in one place approach so closely together that they divide the great land-mass into two unequal portions. The larger portion, which is sometimes called Eurasia, lies wholly to the north of the Equator, and consists of the continents of Europe and Asia. The Suez Canal, which joins the two seas, also affords a waterway from Europe to the East.

The line of separation between Asia and Europe is not very clearly defined, as the Ural Mountains, which form the boundary for about one thousand four hundred miles, rise so gradually on the European side that they hardly break the continuity of the vast northern plain which stretches from the Atlantic Ocean to Behring

Sea. In fact, so gentle is the gradient that the traveller, passing by the great highway from European to Asiatic Russia, only discovers from the marble column bearing the words 'Europe' on the one side and 'Asia' on the other that he has passed over the border.

Asia is not only much larger than any of the other continents, but it also contains many more people. If we take the total area of the land on the globe to be about fifty-two millions of square miles, then Asia will claim about one third. As regards population the proportion is still greater: more than half the people who live on our earth dwell in this great continent. It must, however, be borne in mind that this vast population is very unequally distributed. The well-watered and fertile plains of India and China, and the islands of Japan and Java, teem with hundreds of millions of industrious workers; while the arid wastes of Central Asia and the frozen plains of Siberia, which together make up half the continent, furnish but a scanty subsistence to a population of less than twenty millions.

Within her wide borders Asia contains natural features of wondrous variety, and of most striking grandeur. In the north are vast tracts where the soil is perpetually frozen, the summer sun only just thawing the crust; in the centre are wide-spreading deserts scorched up by the burning midday sun; in the south are pestilential forests and jungles overgrown with the rankest vegetation. The snow-capped Himalayas overtop all other mountains; the gloomy valley in which the Jordan flows sinks below all other depressions; the sterile tableland of Tibet covers an area as large as Central

Europe ; while that immense lake, the Caspian Sea, fills up a hollow nearly twice as large as Great Britain. Her rivers, too, are of the highest importance, almost rivalling in size those of America. Many of them drain valleys of the greatest fertility, the homes of a dense population ; the sacred Ganges and the mighty Yang-



THE SUEZ CANAL

tse-kiang flowing by a larger number of great cities than any other rivers in the world.

In past ages the teeming valleys and rugged tablelands of Western Asia sent forth, in successive migrations, those vigorous races whose descendants now people Europe, the greater part of America, and Australia. From the steppes of Central Asia came, in their turn,

wild hordes of savage warriors, who, with ruthless ferocity, carried fire and sword from the China Sea to the Baltic, established a Mongol line of kings over China, founded the powerful Mogul Empire in India, and who made Constantinople the capital of a realm which at one period reached from the Arabian Sea to Vienna.

The ancient history of Asia is also of surpassing interest. Bordering on the Mediterranean was the 'Promised Land,' the home of the Jewish nation; the valley of the Euphrates and Tigris was the seat of the mighty Assyrian and Babylonian monarchies; further to the west the majestic ruins of Persepolis bear witness to the magnificence of the Persian Empire, which at the height of its power embraced all the lands from the Indus to the Mediterranean, and which was only prevented from spreading into Europe by the dauntless courage and the superior skill and discipline of a handful of Greeks; still later Bagdad became the capital of the unwieldy Arabian Caliphate, which under the successors of Muhammed included Western Asia, Northern Africa, and the greater part of the Spanish Peninsula.

Further, Asia possesses a religious interest far exceeding that to which any other portion of the globe can lay claim. Within her wide borders all the great religions of the world have had their birth. Judaism and Christianity were cradled in Palestine, Muhammedanism was born in Arabia, while Brahmanism and Buddhism, whose followers number more than six hundred millions of the human race, had their origin in the fertile plains of Northern India.

steppes : treeless plains.

hordes : wandering tribes.

Mogul : another form of the word Mongol ; hence the Mogul Empire means the empire founded by the Mongols in India.

Persepolis : once the capital of the Persian Empire. Its majestic ruins, about forty miles from Shiraz, are the remains of the vast palaces of the Persian rulers. It was destroyed by Alexander the Great, 331 B.C.

Caliphate : the successors of Muhammed were called Caliphs, and the dominion over which they ruled was the Caliphate.

Judaism : the religion of the Jews.

Brahmanism or Hinduism : the prevailing religion in India.

Buddhism was an attempt to reform Brahmanism. It is now the prevailing religion in South-eastern Asia.

LESSON 2

THE LOWLANDS OF ASIA

The surface of Asia presents a marked contrast to that of Europe ; for while the greater part of Asia consists of upland regions, the greater part of Europe is made up of lowland plains.

A line drawn along the Caucasus Mountains, round the southern shores of the Caspian Sea, and thence in a north-easterly direction to Behring Strait will broadly divide the highlands of Asia from the lowlands. On the northern side of this line is a vast plain, sloping gradually to the ice-bound shores of the Arctic Ocean, and forming a continuation of the great European plain. On the southern side the continent is almost entirely occupied by lofty and wide-spreading tablelands bordered and crossed by towering mountain ranges, the only important exceptions being the Great Plain of Northern India, which lies between the Deccan and the Central Asian tablelands, and the smaller plains lying towards

the mouths of the great rivers of China, Indo-China, and Mesopotamia.

The Great Plain of Northern Asia presents many different aspects. The south-western portion, comprising the lowlands of Turkistan, consists of dreary wastes all but destitute of vegetation, which once formed the bed of an inland sea. These wastes are in some parts encrusted with salt, while in others they are covered with shifting sands, known as the Kara Kum or 'Black Sands,' the Kizil Kum or 'Red Sands,' and the Ak Kum or 'White Sands.' But, you may ask, do any people live in such a country? 'Yes,' here and there, wherever water is obtainable, the Turkomans cultivate barley, rice, maize, millet, and lucerne, together with wonderful crops of delicious melons, apricots, peaches, and grapes.

To the north of the Sea of Aral the country changes. Gloomy deserts give place to grassy steppes, where the Kirghiz, a pastoral people, rear enormous numbers of fat-tailed sheep, goats, two-humped camels, horses, and cattle.

Further north the steppes are replaced by immense forests of larch, fir, pine, birch, cedar, and alder, forming a belt of woodland which stretches, almost without a break, quite across the continent. So dense is the undergrowth, and so closely are the moss-covered trees matted together, that in places the forest is quite impassable, the sunlight is almost entirely shut out, and even the most daring hunter fears to venture far within those trackless depths. Bordering on this forest zone are extensive tracts of rich black earth, of great fertility, well suited for the growth of corn, and towards

which thousands of peasants from Russia have emigrated.

As we approach the frozen shores of the Arctic Ocean the scene again changes, the trees gradually become smaller and more stunted, and at last disappear entirely. The overflow of the great Siberian rivers every spring has converted this region into a country of dreary swamps, where mosses, lichens, and, in favoured spots, grasses are the only plants. For the greater part of the year the intense cold freezes the ground to a great depth, and but for the reindeer and the dog human existence would be impossible.

If we now travel southwards, cross over the highlands, and visit the great plain which occupies the whole of Northern India, we shall find a marvellous difference in many respects. Instead of desolate wastes and gloomy forests, with a scanty population of hunters and shepherds, we shall find sunny, well-tilled plains, studded with villages and famous cities, where live a teeming population of industrious cultivators, craftsmen, and traders. The abundant rainfall, the numerous rivers, the great facilities for irrigation, together with a hot climate and a soil of great depth and fertility, have combined to make this one of the richest and most highly civilised regions of Asia.

Lucerne : a kind of clover cultivated for fodder.

Lichens : flowerless plants having no distinction of leaf and stem. They form patches of a yellowish

or greenish colour upon rocks, trees, &c. In the north lichens grow freely, and as 'Iceland moss' and 'reindeer moss' form a valuable winter food.

LESSON 3

THE HIGHLANDS OF ASIA, THE PAMIR,
AND THE HIMALAYAS

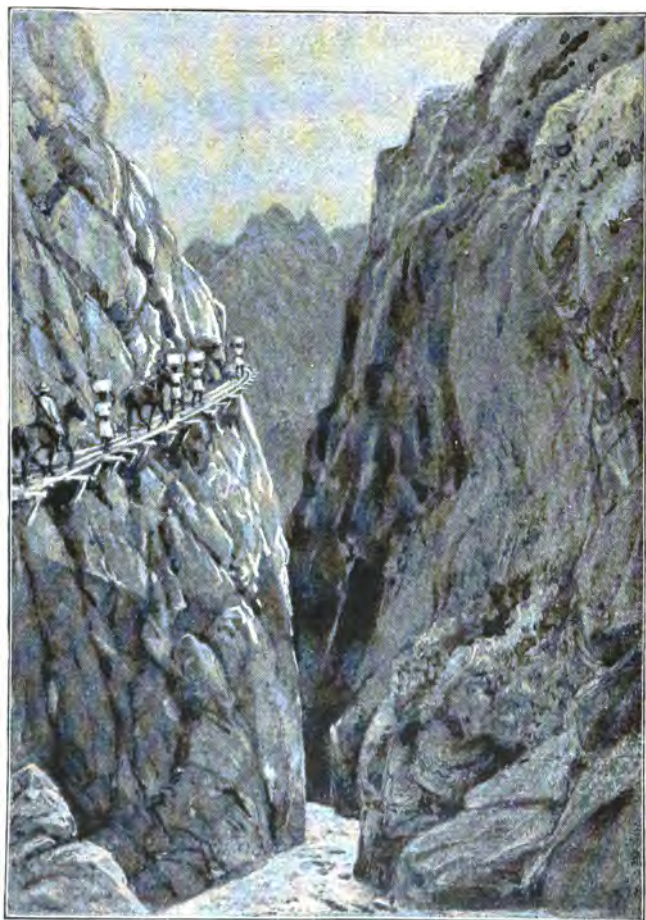
A glance at the map will show that most of the surface of Asia consists of highlands, a large portion of which lies more than ten thousand feet above the level of the sea ; also that most of the great mountain ranges converge towards a region lying immediately north of the north-western corner of India, at the

junction of three of the most extensive empires of modern times—the British, the Russian, and the Chinese.

To the natives this region is known by a name which means the 'Roof of the World'; to us it is generally known as the Pamir. The Pamir may be regarded as the bridge connecting the two great highland masses which occupy the greater part of the continent. It is bordered on the north, east, and south by lofty ranges, whose snow-capped summits rise in places to a height of 25,000 feet; while on the west it slopes steeply to the plains of Turkistan. Within these mountain barriers, which enclose an area about as large as Scotland, the Pamir is crossed by snow-covered ridges, which cut up its surface into rather broad river valleys, lying at a great height above the sea. The region thus consists of a number of upland valleys, or *pamirs*, as they are called, covered with snow for six months of the year, and almost devoid of trees and shrubs.

The rarity of the atmosphere and the severity of the climate, together with the violent winds, which drive before them blinding storms of snow, dust, and sand, cause great hardships to the scanty population. On these lofty uplands the difference between sunshine and shade is most remarkable. At the same hour of the day the sunny side of a rock may be so much as 60° warmer than the shady side; and while one side of the traveller's body may be hot with the sun's rays the other side may be icy cold.

The soil, however, produces nourishing grasses which



THE LONGOO GORGE

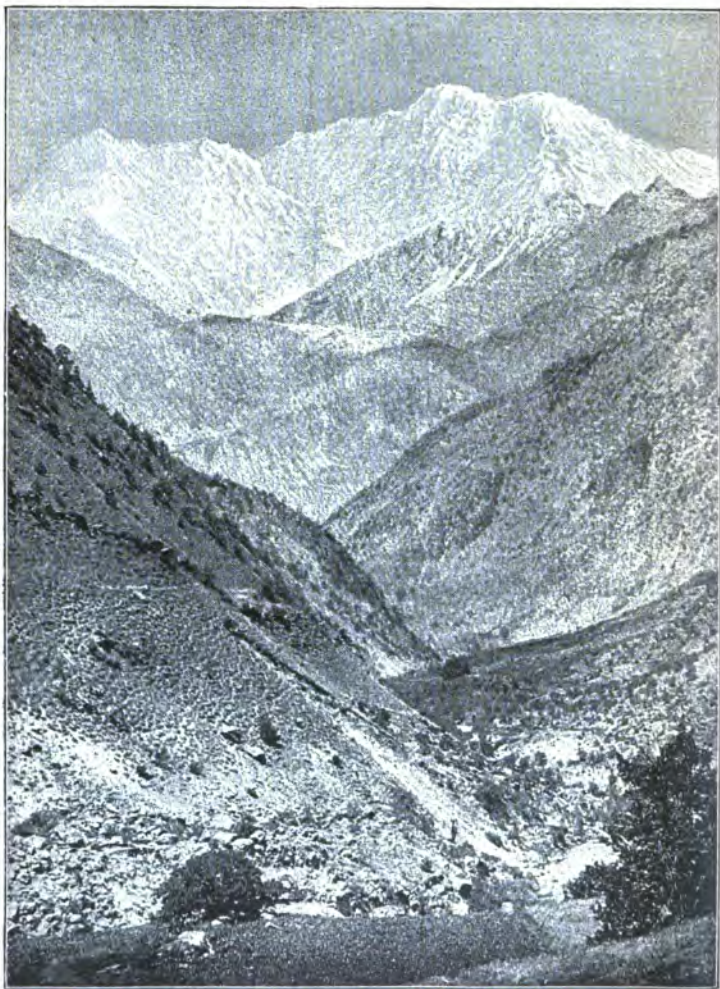
*(From the Earl of Dunmore's 'The Pamirs,' by kind permission of
Mr. John Murray)*

afford excellent pasturage for the flocks of the Kirghiz nomads, who make these bleak valleys their summer camping grounds.

The vast highland district to the east of the Pamir presents four well-defined regions: the magnificent range of the Himalayas, the lofty tableland of Tibet, the extensive depression known to the Chinese as the Han-hai or 'Dry Sea,' and the series of mountain chains and tablelands which make up the Tian-shan and Altai systems.

The Himalayas sweep round from the Pamir in a gentle curve towards the south-east for a distance of fifteen hundred miles, ending on the borders of China, where a succession of deep river-valleys form but a slight separation from the mountains of that country. The system consists of several parallel chains forming long narrow valleys drained by numerous rivers, the whole having a width in places of over two hundred miles. Here and there spurs are thrown off, and the continuity is broken by gorges of great depth through which the streams make their escape southwards into the great Indian plain.

Rising from the lowlands of India the southern outskirts of this mighty system consist of a comparatively low range of hills, which do not exceed 4,000 feet in elevation. Behind these hills rises a second range, reaching in places a height of 10,000 feet, and beyond this towers the main range, with its snow-clad summits, forming the true Himalayas, or 'dwelling place of snow.' This main range consists, almost throughout its entire length, of two parallel chains, the more



NANGA PARBAT

(From Knight's 'Where Three Empires Meet')

northerly one dividing again towards the west and forming the valley through which the upper portion of the Indus flows.

The higher valleys of this wonderful region are filled with enormous glaciers, some of them thirty or forty miles in length, which creep down from the regions of snow, ice, and bare rock to the sunny valleys below.

No other range in the world can show such giant peaks, no fewer than forty rising above 24,000 feet. In the central part of the chain, Everest, the monarch of them all, rears his proud crest to a height of 29,000 feet, while in the western part of the system at least two peaks attain nearly the same elevation. At the extreme western end of the middle range, just where the rushing Indus suddenly turns southward on its journey to the Arabian Sea, the mighty mass of Nanga Parbat, or the 'naked mountain,' mantled with snow and streaked with gleaming glaciers, shoots upwards to a height of nearly 27,000 feet.

The passes also are among the highest, used for purposes of trade, of any part of the world: the Karakoram Pass, over which, during the summer months, a considerable amount of traffic is carried on between Yarkand and Kashmir, is above 18,000 feet in elevation.

nomads: wanderers from place to place in search of pasture.

Kirghiz: pastoral tribes dwelling

on the steppes between the River Volga and the Tian-shan Mountains.

LESSON 4

THE TIBETAN PLATEAU, THE HAN-HAI
AND ITS BORDERS

Between the Himalayas and the Kuen-lun Mountains lies the plateau of Tibet, the largest and loftiest tableland in the world. Its great elevation, its remoteness from the ocean, the altitude and difficulty of the mountain passes, which are its only means of communication with the outer world, combined with the hostility of the natives, have contributed to make this one of the least known districts upon the face of the earth. 'To the north Tibet is composed of lofty plateaux, lying in some cases at an elevation of 18,000 feet, intersected by numerous chains of mountains running from east to west ; a bleak, arid country, either desert or inhabited by a scattered population of nomads. Further south the country is inhabited by pastoral tribes, the short succulent grass with which most of the ground is covered affording excellent pasturage to their flocks and herds, as well as to enormous numbers of wild animals, such as the yak, the antelope, and the ass.' It is only in the south and south-east, where the elevation falls in places to as low as 11,000 feet, and where the rain is more abundant, that the larger valleys are inhabited by a settled population, who live in houses and cultivate the soil.

To the north of Tibet, and parted from it by lofty mountains, lies a great depression stretching eastwards from the Pamir for over two thousand miles. Being

far removed from the influence of rain-bearing winds this hollow is mostly occupied by a vast sandy desert, aptly termed by the Chinese, Han-hai or Dry Sea. At one time it was evidently the bed of an inland sea as large as the Mediterranean, and was probably joined, by means of a trough lying to the north of the Tian-shan, to another great inland sea, which extended from Lake Balkash to the Caspian.



Photo: W. P. Dando, F.Z.S., Regent's Park.

A YAK; TIBET

Towards the middle the Han-hai narrows, dividing the desert into two parts, the western forming the basin of the Tarim River, while the eastern is usually known as the Gobi or Shamo. This narrowing is very important, first, because it affords the shortest route across the desert, and secondly, because it lies between the only two openings available for large bodies, such as caravans and armies, to pass between the east and the west. This was the way by which in times past the teas and silks of China reached Europe, and by which at various

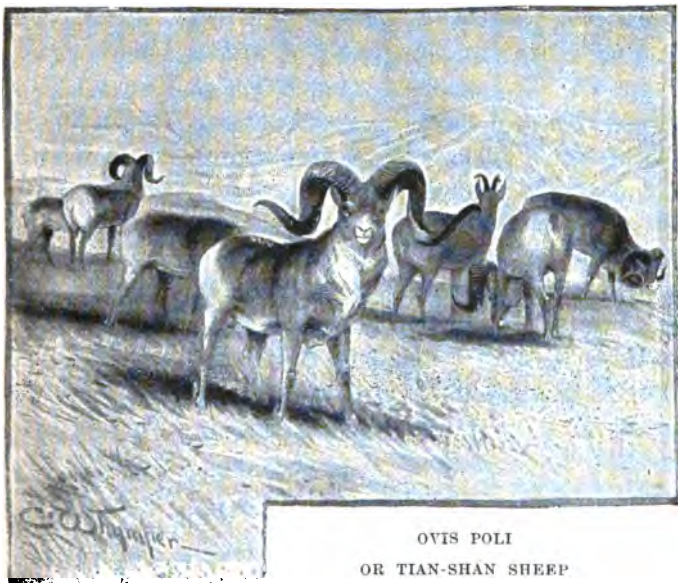
times hordes of fierce barbarians swept southwards and northwards on their devastating raids. Here, too, the birds of passage cross on their migration from Southern to Northern Asia, and in spring the reedy swamp of Lob-nur is literally alive with waterfowl, which find this an admirable resting place on their long desert journey.

The Tarim basin, or the Western Gobi, as it is sometimes termed, is completely shut in on the north, west, and south, by a wall of magnificent snow-clad mountains at the foot of which is a strip of settled and cultivated land lying like a green fringe around the edge of the desert. Through the midst of the hollow flows the Tarim, its banks edged with thickets of poplars, willows, and tamarisks, together with beds of tall reeds and grasses. The rest of the basin is a waste of shifting, treacherous sands, which, driven by the wind, are ever encroaching upon the tilled land. Ruins of buried cities show that much of what is now desert was once a prosperous and well-cultivated district.

The Great Gobi or Shamo Desert, which occupies the eastern portion of the depression, differs somewhat from the western part. Its bordering mountains do not form such magnificent ramparts as the Tian-shan and the Kuen-lun, nor has it any considerable river like the Tarim. Its sands, too, are firmer and less liable to drift, and on the higher ground loose stones and rocks alternate with a growth of saline plants and coarse grasses. On the neighbouring steppes the Mongols rear sheep, camels, and ponies. Nothing now remains to remind us of the time when these people were the terror of Asia. They are still splendid horsemen, and as their

religion, Buddhism, teaches them to be humane, they treat all animals with kindness and consideration. In other respects they are indolent, dirty, gluttonous, and superstitious.

North of the Han-hai, lies the extensive mountain system which forms the northern boundary of the



eastern highland mass. Rising from the plains of Turkistan, the Tian-shan, or 'Celestial Mountains,' extend eastward for one thousand five hundred miles, with a breadth in places of five hundred miles, and culminate in Mount Kaufmann at an altitude of 25,000 feet. Further east the Altai, or 'Gold Mountains,' with their

continuing ranges stretch to Behring Sea. A remarkable feature of the western portion of this system is the large number of long narrow valleys parallel to the main chain and sometimes hundreds of miles in length. Some idea of the difficulty of crossing the system may be gathered from the fact that between Kashgar and the Ili Valley no fewer than eight snow-clad ridges must be passed over.

Throughout the mountains of this region the magnificent wild sheep, with its enormous twisted horns, is still to be found, though its wariness and great swiftness make it a very difficult quarry for the hunter. Specimens have been procured the horns of which, measured along the outer curve, reached the astonishing length of 4 ft. 9 in. When the famous traveller Marco Polo, who visited these districts over six hundred years ago, spoke of sheep as large as donkeys, his statements were regarded as fables, and it is only within recent times that travellers have confirmed the great Venetian's words.

succulent: juicy.

quarry: the object of the chase.

tamarisks: trees or shrubs with very small scale-like leaves.

Marco Polo: a Venetian who travelled through Asia towards the end of the 13th century. He entered the service of Kublai

Khan, the Mongol ruler of China, and by him was employed in various missions all over Eastern and Southern Asia. The record of his remarkable experiences is one of the finest books of travel ever penned.

LESSON 5

THE IRANIAN TABLELAND

The great highland mass lying to the west of the Pamir is cut into two portions by the Persian Gulf and the lowlands of Mesopotamia. The eastern part forms the Iranian tableland, while the western consists of the tablelands of Asia Minor and Arabia.

The tableland of Irania includes the whole of the region lying between the valley of the Indus and the valley of the Euphrates and Tigris. Along its eastern side it is bordered by the rugged Suliman range, which separates the bleak highlands of Afghanistan and Baluchistan from the heated plains of India. The passes through this range are of the utmost importance, as they are the only roads by which large bodies, either invading armies or peaceful traders, can pass between India and the west. The two most notable are the Khaibar Pass, the road from Northern India to Kabul, and the Bolan Pass, further south, leading to Kandahar.

On the north of the plateau a series of lofty offshoots from the Pamir occupy most of Afghanistan. The Hindu Kush is the chief of these ranges, and in its eastern portion exceeds 20,000 feet in elevation ; towards the west, however, it falls considerably, and the passes can be crossed without much difficulty. The western continuation of this chain joins up to the Elburz Mountains, which, after fringing the southern shores of the



A VALLEY IN THE HINDU KUSH

(From Youngblood's 'Heart of a Continent,' by kind permission of Mr. John Murray)

Caspian, are merged in the highlands of Armenia. The highest peak, the shapely cone of Demavend, with its dazzling crest of snow, forms the most conspicuous landmark in Persia; and it is said that travellers journeying towards the south keep it in view for a distance of one hundred and sixty miles.

Along the south-western side of the Iranian plateau stretch a remarkable series of lofty parallel mountain ranges whose highest summits rise to an altitude of not less than 17,000 feet. These chains, with their intervening valleys, occupy a width of over two hundred miles and fall towards the burning plains of the coast by a succession of abrupt rocky steps; communication between the coast and the interior of Persia is thus rendered both tedious and difficult, most of the traffic being carried on by means of the sure-footed mule.

The whole plateau is so crossed by mountain ranges that but little of its surface is level. Across the middle lies an extensive depression of extreme desolation; the plains become more extensive, but also more barren and dreary; shifting sands are constantly encroaching on the arable land, and salt marshy tracts, known as *kavirs*, take the place of the fertile valleys.

The most extensive of these salt marshes is the Great Salt Desert of Khorassan, which covers a great part of Eastern Persia. 'In different parts the kavar presents a different aspect. Sometimes it is dry and soft, with a thin glazed crust of salt on the top and with powdery soil beneath. Sometimes it presents an expanse of hard baked clay. Again, it will take the form of hillocks of mud, some of which are solid, while others

are covered with a thin crust often covering a dangerous hole. When the water is lying on its surface, particularly in winter, it will in one place resemble a great lake, in another it will be a slimy swamp; while after the evaporation of the early summer suns the saline incrustation on the dried-up patches will glitter like sheets of ice.'



AN ARMENIAN VILLAGE AND MOUNT ARARAT

(From Harris's 'On from Batoum')

But, you may say, how is this crust of salt formed? Well, you know that if salt water be boiled in a test-tube the water gradually evaporates, and after a time the remainder is so full of salt that the water can no longer hold it in solution. The salt is therefore deposited at the bottom of the tube. A bed of salt is formed in just such a manner. The salt swamp is lower than the surround-

ing district, and there is consequently a considerable drainage towards it. The rivers flowing into it are more or less salt; the great heat of the desert causes so much evaporation that the salt can no longer be held in solution, and is accordingly deposited as a crust on the ground.



MILITARY ROAD AND FORTRESS IN THE DARIEL GORGE

In the desert to the south of Teheran is to be seen what is probably the largest bed of rock salt in the world. It is hard and solid like ice, with a thickness of several feet, and is said to have a width of not less than twenty-five miles.

The southern part of the depression is mainly

covered with shifting sands impregnated with salt which in places have been banked up by the winds into huge mounds. The fierce sun, beating down upon the burning surface of these ever-changing sands, renders the air so intensely hot and parched that it is impossible for either animal or vegetable life to exist.

North of the Armenian highlands, and connected with them by a narrow ridge, is the lofty range of the Caucasus, which for seven hundred miles forms a natural boundary between Asia and Europe. On the European side the chain rises rather rapidly from the steppes, presenting the appearance of a rocky barrier, overtopped by numerous snow-crested summits. Mount Elburz, over 18,000 feet in elevation, is not only the loftiest, but also the most conspicuous peak, being visible for a distance of two hundred miles across the Russian plain.

Midway between the Caspian and the Black Seas the range is cut in two by the remarkable Dariel Gorge, the only natural pass by which traffic can be carried on between the districts lying on either side of the mountains. A foaming torrent rushes through the narrow defile, and on each side the mountains rise like a wall to the height of 5,000 feet, forming a scene of most impressive grandeur. Until the present highway was made by the Russians, we may see from the picture that communication by this deep gorge must have been exceedingly difficult, and may easily understand why the ancients termed it the 'Caucasian Gates.'

impregnated : filled with particles.

LESSON 6

THE TABLELANDS OF ASIA MINOR AND ARABIA

From the highlands of Armenia two mountain ranges proceed towards the west, one of which follows the shores of the Black Sea, while the loftier chain, known as the Taurus Mountains, follows the Mediterranean.

Between these ranges lies the extensive plateau of Asia Minor, the interior consisting largely of bleak treeless tracts, upon which are pastured flocks of sheep and goats, together with large numbers of camels. Numerous lakes, both fresh and salt, are scattered over its surface, the largest of which, Tuz-gol, is about fifty miles long. The deposits on the borders of Tuz-gol and other salt lakes are often of sufficient depth to supply the neighbourhood with salt.

The valleys and the narrow coast strip between the scarp of the plateau and the sea are remarkably fertile, those on the west and south producing great quantities of excellent grapes, olives, and figs. About thirty miles from the ancient city of Tarsus the mountains are pierced by a deep gorge known as the 'Cilician Gates.' This famous pass has been in all ages the main highway from Asia Minor to Syria and the valley of the Euphrates.

Southwards from the Taurus, ranges of hills skirt the eastern shores of the Mediterranean and Red Seas, forming the western edge of the great Arabian tableland.

With the exception of a narrow strip by the coast, this plateau, which is mostly desert, occupies the whole of the region from the Red Sea to the Persian Gulf, and from the Gulf of Aden to the Euphrates Valley.

‘The northern desert of Arabia is a vast plain or succession of plains and plateaux, so poor in soil and so scantily watered that no cultivation is possible except by irrigation. The surface soil is composed in part of a layer of shingle, in part of a sandy loam covering the underlying beds of chalk and hard gravel. Roughly speaking, the district is without mountain streams or freshwater lakes.

‘A line of hills connects Damascus with Mosul. Above the hills are permanent sheep pastures; below, camel pastures only. The plain is clothed with aromatic shrubs, stunted but woody, of which wild lavender is a good type. Some of these are excellent for camels, others for sheep, and not a few worthless. On the better soils are grasses and flowering plants but no turf. On these upper plains the Bedouins congregate in spring. When the grass is withered new leaves appear on the wild lavender and kindred shrubs, and the first autumn rains bring a fresh growth of greener food. In seasons of great drought the Euphrates and Tigris Valleys receive the whole population, whose camels find pasture in the great tamarisk beds fringing the rivers.

‘With the first frost the camel-rearing Bedouins migrate south of the hill range for suitable food. The tribes residing all the year round north of the hill range keep only sheep. In March the tribes move again north. The Hamad (the district bordering on Palestine)

at this season is a beautiful sight—vast undulating plains of grass and flowers, among which the purple stock forms good camel food. The hollows are filled with meadow grass, wild barley, wild oats, wild rye, blue geranium, and camomiles. On the poorer soils grow tulips, marigolds, asters, irises, and pink wallflowers.'

(From Blunt's '*Bedouin Tribes of the Euphrates*,' by
kind permission of Mr. Murray.)

scarp : a steep descent.

aromatic : fragrant-smelling. Aromatic plants are generally acrid-tasting.

loam : generally a soil composed of sand, clay, and vegetable matter.

LESSON 7,

THE CLIMATE OF ASIA, THE NORTHERN PLAIN AND THE CENTRAL HIGHLANDS

What do we mean when we speak of the climate of a place? We mean the state of the atmosphere as regards the conditions which affect the growth of plants and animals, such as the temperature of the air, the amount of the rainfall, and the character of the winds.

There are many causes which help to bring about the wonderful diversity of climate prevailing in different parts of Asia. Among the main conditions to be considered are the distance of a place from the Equator; its elevation above the sea; the direction of the prevailing winds; the character of the ocean currents; the position of the mountain chains; the nature of the surface of the land, whether bare or covered with vegetation; and the direction in which the land slopes.

As regards its climate Asia may be broadly divided into three zones: the northern, sloping from the central tablelands to the Arctic Ocean; the central, including the lofty tablelands extending right across the continent; and the southern, which embraces the great southern peninsulas, Southern China, and the great islands lying to the south-east of the continent.

The characteristic feature of the northern zone is the remarkable difference between the cold of January and the heat of July. Near the coast of Siberia the mean difference between the temperatures of these two months is over 100° ; at Verkhoyansk, which lies just within the Arctic Circle, the difference is still greater: the average temperature for July is 60° F., while in January it is 116° colder.

This intense cold is due not so much to the distance from the Equator as to the facts that the lofty mountain chains of Central Asia effectually prevent the moderating influence of the warm southern winds, and that the land lies quite exposed to the cold winds from the Arctic Ocean. Consequently in the north the ground is permanently frozen to a great depth, the small rivers become masses of solid ice, while man can only exist by clothing himself with a double suit of furs. In the short summer the dryness of the atmosphere enables the sun to so warm the earth during the long days that vegetation grows with astonishing rapidity: the ground becomes covered with grasses and flowering plants, and in favoured spots even crops of grain are produced.

On the lofty central tablelands, too, there is an astonishing variation in the temperature; not only is

there a remarkable difference between midsummer and midwinter, but also between midday and midnight. In Tibet, which is as near to the Equator as Northern Egypt, the average temperature for January falls below freezing point, while in July it rises to 80° and even 90°. The lakes and rivers are covered with thick ice in winter, and in the more elevated districts the thermometer falls below freezing point every night, even in summer, though in the daytime it may rise as high as 90°.

If we look for the causes of these great variations we shall find they are principally due to the great elevation of the tablelands, to the sterile character of their surface, and to their remoteness from the sea.

The rarer air of these highlands allows more of the sun's heat to pass through it to the ground, which thus becomes greatly heated during the long summer days, while in winter the ground parts more readily with its heat than is the case in lowland regions where the air is denser.

The sterile nature of these uplands also helps to increase the variation in temperature, because in summer a dry surface soil accumulates more heat than one which is moist or covered with vegetation, while during the clear cold nights of winter a dry surface loses a greater amount of heat than one covered with vegetation; the forests acting as a cloak, tempering both the summer heat and the winter cold.

These reasons also explain the great difference which occurs on all the plateaux from the Mediterranean to the Pacific between the heat of the day and the cold of the night.

Again the great tablelands of Asia are chiefly situated at a considerable distance from the sea, and are consequently but little affected by its modifying influences. A large body of water changes its temperature very slowly, and there is therefore but a slight difference between the summer and winter temperatures of the ocean; hence its influence on the lands near it is to lower the temperature in summer and to raise it in winter.

To lessen the discomfort caused by the severity of the cold the inns and dwelling-houses of the colder districts of the Chinese Empire are provided with a most efficient kind of heating apparatus called the *kang*. 'The kang is a platform about two and a half feet high and five feet broad, made of brick, the inside of which is filled with a flue carried four or five times up and down the whole length of the kang. At one end is a boiler, in which the family dinner is cooked. Outside in the yard is a chimney, ten or twelve feet high, which creates a draught through the flue. Thus the whole of the smoke and heat of the kitchen fire passes backwards and forwards through the kang, warming it thoroughly like a stove, and finally emerges through the chimney. The top of the kang is covered with a matting made of strips of bamboo or the rind of the tall millet. The convenience and economy of the kang are marvellous. Throughout the day it serves as a place to sit and talk or gamble; at meal times it is the dining-room, the food being served on small tables a foot high, around which the family squats. In the evening the beds are unrolled, and it forms the sleeping place. In the cold weather, with the thermometer below zero outside, and below freezing

point even within, a nice warm kang makes a most agreeable bed to sleep upon, besides serving as a stove to warm the house. Very little fuel is required to heat it. A boy lights a wisp of straw and stuffs it in a hole at the foot of the kang—so small a wisp very often that he has scarcely time to leave the room before it is burnt out—and it seems impossible⁹ so insignificant a fire can affect the great mass of brickwork. But in about half an hour a gentle glow pervades the top of the kang, and all the night long it remains delightfully warm.'

60° F.: F. is the contraction for Fahrenheit, the kind of thermometer generally used in England.

On the scale of this thermometer freezing point is marked 32°, and boiling point 212°.

LESSON 8

THE RAINFALL AND THE SOUTHERN ZONE

For the causes of the excessive dryness of the central tablelands we must look to the direction of the prevailing winds and the position of the mountain chains. It has already been pointed out that during the summer the surface of the plateaux is greatly heated by the fierce rays of the sun; the air consequently becomes more rarefied, and an indraught of the denser air from the equatorial regions sets in. The rotation of the earth causes this wind from the south to have a general south-westerly direction; hence it is known as the south-west monsoon.

The surface temperature of the seas on the south of Asia is no less than 80° F., and the air carried from them

by the south-west monsoon is highly charged with vapour. Before this rain-bearing wind can reach the central tablelands its progress is arrested by the lofty mountains which border them on the south, and upon which it is compelled to discharge its moisture so freely that it becomes an intensely dry wind, so dry that flesh exposed to its influence instead of putrefying is almost immediately dried up and crumbles to dust. The high passes in the north of the Himalayas are lined with the bodies of pack animals, which literally dry up instead of rotting.

During the winter, when the temperature falls, the air becomes denser and the prevailing wind blows towards the Equator as the north-east monsoon. As this is a land wind, it brings little or no moisture to these parched regions. Hence over large areas in Arabia, Persia, and Turkistan hardly any rain falls, while still larger areas have a rainfall of but a few inches in the year.

The southern climatic zone includes India, Indo-China, Southern China, and the great islands which border the China Sea. Here the average temperature for the year is 80° and there is not much variation between the hottest and coldest months. At Calcutta it is only 15° cooler in winter than in summer; at Bombay and Madras there is still less difference: while at Singapore and on the coast of Ceylon the difference between the hottest and coldest months is not more than 5° .

The greatest difference is to be found on the plains of Northern India, where the summer heat is very

intense, the Himalayas screening them from the cooling north winds, while hot, parching winds blow over them from the Great Indian Desert. During the winter, however, when the north-east monsoon blows, they are much cooler.

The heavy rainfall which is characteristic of this region is due to the fact that the mountain chains face the rain-bearing winds. The south-west monsoon, full of vapour from the heated southern seas, upon reaching the Western Ghats, the Himalayas, and the mountains of Indo-China, is forced up into colder regions; condensation consequently takes place, and immense quantities of rain fall on these districts. At some places on the Western Ghats over twenty feet of rain falls in the year; while on the Khasi Hills, which intercept the southern monsoon on its passage up the Ganges Valley, the precipitation is greater than that of any other district in the world, as much as fifty feet of rainfall having been registered in the year, most of which fell between the months of June and October.

Some portions of Southern Asia have two rainy seasons; thus to Ceylon, the Malay Peninsula, and the great islands of South-eastern Asia both monsoons are rain-laden winds. The climate of these regions is always hot, moist, and enervating. It is very unhealthy for Europeans in the lowlands and the deltas of the great rivers, where fevers and dysentery are constantly present.

There is, however, one district of this zone which suffers from a deficient rainfall, the Thar or Indian Desert, which covers a large area to the east of the Lower Indus. Here there are no lofty hills to arrest

the rain-bearing winds from the Arabian Sea, which consequently blow over and do not deposit their moisture until they meet the mighty barrier of the Himalayas ; in addition, the hot, dry surface of the desert tends to raise the temperature of the rain winds, and thus prevents condensation.

dysentery . a disease of the bowels, | climates, and often due to bad
common and dangerous in hot | water and unsuitable food.

LESSON 9

SIBERIAN RIVERS—THE OB AND YENISEI— AND LAKE BAIKAL

Of all the countries of Asia, Siberia possesses the most extensive system of waterways. Her four great rivers with their tributaries afford some thirty thousand miles of navigable waters. Between Tobolsk and Yakutsk there are but two short breaks, one between the Ob and the Yenisei and the other between the Yenisei and the Lena, together amounting to no more than seventeen miles, in a water communication of about six thousand miles.

This magnificent system is, however, of little use commercially, as the rivers are icebound for the greater part of the year, while their estuaries are only open for two or three months in the summer ; hence though vessels have passed through the Kara Sea, ascended the Ob and the Yenisei, and returned with a cargo the same year, it is not probable that much of the produce of Siberia will be carried by this route. To the Siberian,

however, the rivers are of considerable service : steamers and barges ply on them in summer, and sledges glide over their glassy surface in winter ; further, the enormous quantity of fish which they yield supplies the natives with one of their chief means of subsistence as well as an important article of export.

The Ob, the greatest of the Siberian rivers, drains an area equal to one-third of Europe. Its longest affluent, the Irtish, rises on the Mongolian plateau and after passing through the mountains flows across the prairies and grassy steppes of the great Siberian plain. On its left bank is a rich black-earth district producing excellent crops of wheat and other cereals ; and near the junction of the Irtish with the Ob are thousands of square miles of impenetrable forests. Here, too, are the dreaded 'quivering marshes,' where the treacherous covering of grassy vegetation only serves as a cloak to hide the perils of the quagmire beneath. The lower course of the great stream lies through a region of forest land and dreary tundra until it enters the Arctic Ocean by the long narrow gulf which bears its name.

The longest river in Siberia is the Yenisei, which with its great feeder, the Angara, has a course of about three thousand miles. Like the Irtish, the Angara rises on the southern side of the mountains, and after draining part of the Mongolian plateau enters Lake Baikal. This lake, the 'Holy Sea' of the natives, is the largest freshwater lake in Asia, and perhaps the deepest in the world. Its waters, which are remarkably clear, abound with salmon, sturgeon, and many other kinds of fish, and, strange to say, seals are found on its shores. Its

only outlet is the Angara, which flows for some distance through rocky gorges, with so strong a current, and so great a volume of water, that the rapids never freeze, though the surface of the lake may be covered with ice five or six feet in thickness.

At Yeniseisk, where the Angara joins the Yenisei, the river is over a mile wide, and flows through magnificent forests of pines and larches, the giants of which sometimes shoot upwards to a height of 200 feet. Lower down, the Yenisei receives another mighty feeder, which in its upper course approaches within fourteen miles of the Lena, and finally, after providing an unbroken waterway from the borders of China through the very heart of Siberia, this noble stream enters the Arctic Ocean by an estuary some three hundred miles in length.

cereals: food grains such as	quagmire: soft wet soil which
wheat, barley, maize, rice, &c.	yields to the foot.

LESSON 10

THE LENA AND THE AMUR, HUNTING AND FISHING

The Lena rises on the seaward side of the mountains near Lake Baikal, from which it is separated by a narrow ridge. It is also an immense river, navigable almost throughout its entire length, and with its wide-spreading affluents forms the chief means of communication in Eastern Siberia. At Yakutsk, 1,200 miles from its mouth, it is over four miles in width; lower down

it expands to a width of seventeen miles, diminishing again as it nears the ocean, which it enters by a number of channels forming a vast delta, extending for two hundred and fifty miles along the coast. As it flows through a region of excessive cold its channel is closed



REINDEER AND SLEDGE

for the greater part of the year ; at Yakutsk it is open for about a hundred and fifty days, while its mouth is not free for more than four or five weeks.

The hardy Yakuts, the chief people dwelling in its basin, are more intelligent and enterprising than most of the native tribes of Siberia. They grow a little corn,

chiefly barley, in the upper valleys during the short but warm summer ; but cattle-rearing and hunting are their principal means of support. Further north cattle and horses give place to reindeer and dogs, and the tribes depend for their subsistence upon fishing, hunting the wild reindeer, and the capture of the wildfowl which come in such countless numbers to the lakes and swamps.

The game which they kill in summer is stored in ice-cellars for winter use. 'It is an undertaking of considerable magnitude for these people to excavate a cellar with the tools they have at command, which consist alone of a wooden spade tipped with iron, the tip of an inch and a quarter being split so as to fit on both sides, and held in place by iron hooks, which are driven through the spade and turned up on the back. The iron fitting is sold by the traders, and the spade is soon fashioned out of a straight piece of tough spruce. It is a tool used by all the natives, forming a part of their winter kit to clear away the snow from their fox-traps. But the ground is solidly frozen to an average depth of forty-seven feet in the district of Yakutsk ; and when a cellar is to be dug a fire is first built, thawing out a few inches of earth, which is then removed, and the excavation so continues on through a succession of fires until a proper depth has been reached, when the sides are retained with small round timber, which the next winter freezes in as firm as a stone wall, and so gives the finishing touches to a cellar of perpetual frost.'

The fourth great Siberian river, the Amur, is formed by the union of two streams, the Argun and the Shilka.

Its upper course for a considerable distance forms the boundary between Siberia and Manchuria, but its lower course lies entirely within Russian territory. This fine river flows through a fertile, well-wooded country, of great mineral wealth, and after providing a navigable waterway of over two thousand miles discharges its waters into the sea near the northern end of the great island of Sakhalin. Though much obstructed at its mouth by sandbanks and shallows, the Amur is likely to become of greater commercial importance than the other Siberian rivers, as its channel is free from ice for half the year.

Like the other rivers of this region, the Amur swarms with fish, especially salmon, which during the spawning season ascend the river in immense shoals. At these times the natives use many devices to capture them. 'Sometimes across shallow streams a weir is constructed of willow twigs pierced with two small holes at the bottom, on the far side of which is a coop. The salmon pass through the holes, and, unable to get beyond the coop, rise helplessly to the surface, and are then pulled out with a gaff. They are also netted in large quantities or pulled out at shallow places with a long pole, at the end of which is a hook. The salmon are split open and dried in the sun, and they constitute a valuable and palatable diet during the winter.'

spruce: a lofty tree of the fir
family.
coop: an enclosure.

weir: here a fence of stakes.
gaff: a hook with a handle used
to secure heavy fish.

LESSON 11

TWO GREAT CHINESE RIVERS

China is traversed from west to east by two great rivers, the Hwang-ho and the Yang-tse-kiang. Both rise in the heart of the great central plateau, on the southern side of the Kuen-lun range. Their upper courses are separated only by a narrow ridge of mountains, but as they approach the borders of China Proper they diverge widely, the Hwang-ho making a prodigious bend to the north, while the Yang-tse-kiang makes a smaller bend towards the south, leaving a stretch of a thousand miles between. On entering the Chinese plain they again approach each other, the turbulent Hwang-ho discharging its yellow flood into the Gulf of Pechili, while the majestic Yang-tse-kiang flows placidly on to the Yellow Sea.

The Hwang-ho, or 'Yellow River,' takes its name from the extremely fertile yellowish-brown earth, known as *loess*, which is spread over most of its basin, covering the surface in places to a great depth. This yellow earth also gives its name to the Yellow Sea ; the Emperor of China is styled 'Lord of the Yellow Earth,' and even the Chinese people are often spoken of as the 'yellow race.'

In the river valleys the loess cliffs often rise to a great height, and when undermined by the floods fall and are carried down by the stream ; hence the shallow bed of the Yellow Sea. Where these cliffs are removed from the action of water caves are dug out, which form

the homes of millions of the inhabitants of this region. Among the poorer people these caves are simply holes dug in the vertical side of a loess cliff, a sufficient thickness of it being left in front to constitute a wall for the dwelling. In this a door and window are cut. The better class of cave or cliff dwelling consists of a brick-lined arched excavation about twenty-five feet long and twelve feet broad. The front is also of brick, and the floor is usually paved with tiles.

For so long a river the Hwang-ho receives but few tributaries, and is remarkable for its disastrous floods and for the extraordinary variations which have taken place in its lower course. These changes have been so extensive, and of such a destructive character, as to earn for the river the name of 'China's Sorrow.' History records no fewer than nine great changes in its course, sometimes entering the Gulf of Pechili as far north as the Pei-ho, at other times entering the Yellow Sea nearly as far south as the Yang-tse-kiang. For six hundred years prior to 1853, the river followed the southern channel, then bursting its embankments again flowed to the Gulf of Pechili. In 1887 another destructive change to the southern outflow took place, by which it is estimated at least a million persons perished; and in 1889 its course was again diverted to its present outlet, the Gulf of Pechili. The rapidity of its current and the numerous shallows which obstruct its course render the Hwang-ho of very little use commercially. Few towns stand on its banks, and Singan is the only town of the first rank in its basin. This large walled town, however, is one of the most notable cities in China. For some two thousand

years it was the capital of the empire, and during the recent troubles (1901) was the refuge of the Imperial Court.

Of a very different character is the Yang-tse-kiang. A series of large lakes, edging its lower course, act as receivers for the overflow of the river when in flood. In spite of numerous rapids in its upper course, this noble river is navigable for about two thousand miles from the sea, and for a further thousand miles a large amount of traffic is carried on in small boats.

With its tributaries the Yang-tse-kiang affords about twelve thousand miles of navigable waterways through the richest and most productive part of China ; hence its basin has been for ages the home of a dense population. On its banks are numerous great cities, between which an enormous traffic is carried on, while its broad waters are crowded with thousands of vessels, the homes of a vast floating population, who know no other dwelling-place.

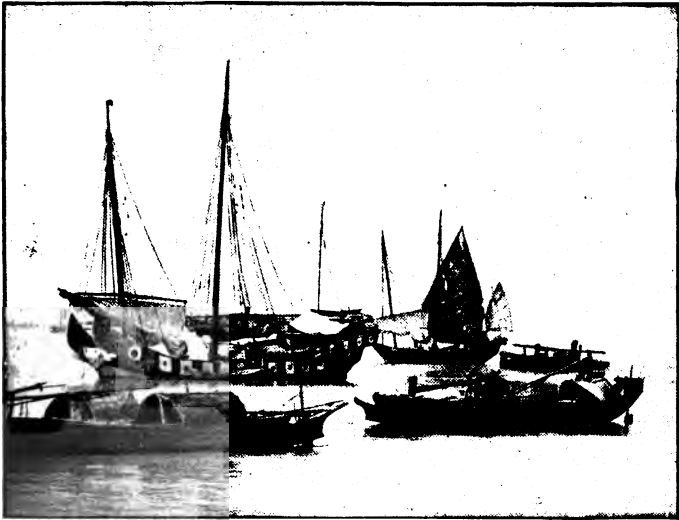
LESSON 12

THE CITIES OF THE YANG-TSE-KIANG BASIN

Let us now take a journey up this great water highway, and as we want to call at many places on our way, a Chinese river-boat manned by a native crew will be most suitable. Our craft is something like a house-boat provided with mast and sails, with a fairly roomy cabin for ourselves and a somewhat limited accommodation for the crew.

The entrance to the river is about sixty miles wide,

and in places very deep, though the quantity of sediment brought down by the stream is constantly accumulating and forming great sandbanks, which ultimately growing into islands become the homes of thousands of industrious fishermen. Near the mouth, but away from the main stream, lies Shanghai, the greatest centre of British trade



A CHINESE JUNK (THE LARGE CRAFT) AND RICE BOATS

in China. Most of the European goods are brought here for distribution, but owing to the amount of silt brought down by the stream, the harbour is only kept open with the greatest difficulty, and the largest vessels are no longer able to come up to the city. On this account Chinkiang, which has a more advantageous situation farther up the

river, threatens to take much of the Shanghai trade. Here we shall see fleets of junks coming by the Grand Canal from the great city of Hanchau and the fertile districts around it. The next calling place is the famous town of Nanking, once the southern capital, and the seat of extensive cotton and silk industries.

After some seven hundred miles' sailing we reach Hankau, the greatest trading centre on the river, and, with its suburbs, one of the most thickly peopled districts in the world. Here are great ocean-going steamers exchanging their cargoes of European and American goods for the products of this rich district, fleets of junks bringing salt from the coast, timber rafts bearing the products of the forests of Hunan to the sea-ports, together with countless native craft of all sizes, trading both up and down the river and its great tributaries. Hankau is the great centre of the tea trade, and here is prepared an enormous amount of brick-tea for the markets of Siberia, Mongolia, and Tibet. This brick-tea is prepared from the commonest and cheapest kinds. Tea-dust, sweepings, and stalks are collected, powdered, steamed over hot water, and then pressed in moulds into hard slabs about nine inches long, six inches wide, and nearly an inch in thickness. These slabs are afterwards wrapped in paper and done up into packages, those for Siberia and Mongolia going down the river and on to Tientsin for distribution, while the packages for Tibet are sent up the river by boat, and finally carried by coolies over the steep mountain roads.

Four hundred miles further up is Ichang, where steam navigation ceases. Above this town the river

passes through a number of gorges, and our boat must be hauled through the rapids by a gang of coolies : sometimes as many as a hundred are employed to haul up one junk. In spite of these obstacles, a great trade is carried on with Chungking, the great distributing centre for Western China. Above Ichang but few 'foreign devils' are seen, and if we wish to avoid the unpleasant and often hostile attentions of the people, it will be well to dress in Chinese fashion, assume the pigtail, and cover our eyes with spectacles.

Near Chungking are numerous salt wells, some not less than fourteen hundred feet in depth. The brine is lifted up in bamboo tubes, which are raised by a drum worked by oxen. Close by are vast supplies of natural gas, which is used for evaporating the brine. Farther to the north-west, on a feeder of the Min, is Cheng-tu, the capital of Sechwan, the largest province in the empire. This ancient city, which is the cleanest and best built city in China, is situated in the midst of an exceedingly productive district, fields of opium madder, and sugar alternating with barley, wheat, and other grains.

Higher up the country becomes much more mountainous, and the boat must be abandoned for the sedan chair carried by coolies. The streams flow through deep gorges, over which communication is maintained by singular rope-bridges. 'A bamboo cable about three inches in diameter is stretched across the stream about a hundred and twenty feet above the water, and having a free-running, plaited bamboo ring upon it. From this ring an inverted T-piece, with a shank about

four feet long, hangs, and light hauling lines are attached to it and to each bank. The traveller seats himself on the cross of the T, and then, the cable of course being on the curve, on letting go from the bank his own weight carries him half-way or more across. He now takes the hauling line and pulls himself up the curve to the other bank.'

silt : mud deposited from running water.

madder : a plant from the root of which a red dye is produced.

drum : a broad wheel upon which a rope is wound.

coolies : labourers or carriers.

LESSON 13

THREE RIVERS OF INDO-CHINA

In no part of Asia are there so many great rivers confined within such narrow limits as in the north of the Indo-Chinese Peninsula. The streams all flow southwards, each in its own narrow valley, with single ridges of mountains lying between. Fed by the heavy monsoon rains, rising at a great elevation, and hemmed in by mountains, these rapid rivers bring down enormous quantities of mud, a great part of which is deposited at their mouths. Here vast deltas of low-lying fertile land are formed, continuously creeping seawards, and which, though frequently inundated by floods, form the most productive rice districts in the world.

Of the three great Indo-Chinese rivers the Irawadi is of the greatest commercial importance. It is a broad, deep stream, and begins to be navigable for steamers at

Bhamo, above nine hundred miles from the sea. From the forest-clad mountains bordering its narrow valley enormous quantities of teak are obtained and floated down for export, while its extensive delta is almost entirely covered with rice-fields.

In the great rice-exporting district of Lower Burma, the seed is sown either just before or at the beginning of the rainy season. The tender green shoots soon appear through the water covering the fields, grow to a height of two or three feet, and by the time the rainy season has ended the crop is ready for cutting. If intended for export, the 'paddy,' as it is then called, is taken in long boats to the mills, of which there are a great number by the side of the river, where it is cleansed from dirt, separated from the yellow husks, and finally packed in bags ready for shipment.

On the upper course of the Irawadi stands Mandalay, the capital of Upper Burma, and some distance to the north of the town are the famous ruby mines. In the flat and fertile delta is Rangoon, the chief port, an important city with a large Burmese, Hindu, and Chinese population. Along the river banks the numerous rice mills and extensive timber yards indicate the two chief articles of export.

The Salwin, which is nearly twice as long as the Irawadi, rises in Tibet, flows in a deep, narrow, rocky valley throughout its entire length, and is only accessible to ships for a few miles from its mouth. Formerly enormous quantities of teak were floated down its rapid stream for shipment at Maulmain.

The longest of the Indo-Chinese rivers is the Mekong,

which also flows from the Tibetan plateau. For a considerable distance its upper course is only separated from the Yang-tse-kiang by a narrow ridge of mountains, while its lower course lies entirely within French territory, and passes through a hot, moist, unhealthy district. Just where the delta begins the river is joined by a feeder from the only large lake in the peninsula, the shallow Tonle-sap, which during the rainy season increases its length from seventy to 120 miles. Fish are so abundant in its waters that their capture, drying, and salting form one of the chief industries of Cambodia. But the lake is perhaps even more noted for the remarkable remains of ancient civilisation found in its neighbourhood. At the northern end, hidden among the dense forests surrounding its shores, are numerous remains of walled cities, stately palaces, and magnificent temples, the largest of which, Angkor Wat, is one of the grandest and most extensive ruins in the world.

Angkor Wat: a wat is a temple. Angkor is the name of the old capital.

LESSON 14

THREE GREAT INDIAN RIVERS

The Indian rivers may be conveniently divided into two groups, one comprising the three mighty rivers which water the great plain of Northern India, while the other includes the numerous streams which collect the drainage of the Deccan.

Of the three great rivers, the Indus, the Ganges, and

the Brahmaputra, the Ganges is incomparably of the greatest importance both for navigation and irrigation. Unlike the other great Asiatic rivers, the Ganges rises on the seaward side of the mountains, its source being an immense glacier, 14,000 feet above the sea. Bursting through the outlying hills near the city of Hardwar, the



TEMPLES AT BENARES, ON THE GANGES

river flows through the fertile plain in a south-easterly direction, entering the Bay of Bengal after a course of fifteen hundred miles, nearly the whole of which is navigable.

Its chief tributary, the Jumna, rises not far from the main stream, and flows in a nearly parallel channel to the

confluence at Allahabad, collecting through the Chambal and other affluents the drainage of the northern slope of the Vindhya Mountains. Hence, fed by the Son from the south and a number of great feeders from the Himalayas, such as the Gumti and the Gogra, the great river flows gently on through the thickly peopled plains



A TOMB AT LUCKNOW, ON THE RIVER GUMTI

of Bengal, bearing on her ample bosom a vast multitude of boats, and affording one of the most magnificent systems of river navigation in the world.

The delta formed by the union of the Ganges and Brahmaputra is probably the most extensive on the face of the globe, reaching inland in a straight line for 220

miles, and stretching along the coast for about half that distance. The upper portion is a rich and fertile district, but the southern part, known as the Sundarbans, is a wild waste of swamp and jungle, intersected by a network of ever-shifting channels. The most important of these waterways for shipping is the Hooghli, which is only kept open to the great port of Calcutta by constant dredging.

The Brahmaputra rises near the Ganges, but on the northern side of the mountains, at an elevation of 16,000 feet. As the Sanpo it drains the long narrow valley lying to the north of the main chain of the Himalayas. Turning south it enters a deep gorge, which is still imperfectly known, and reappears in the Assam Valley. Here the river becomes navigable, and, fed by countless tributaries from the rain-drenched hills, rises in the wet season as much as thirty or forty feet, covering the valley to a width of several miles. On leaving Assam the Brahmaputra turns southward to its junction with the Ganges, and enters the Bay of Bengal after a course of eighteen hundred miles.

The Indus also rises on the northern side of the mountains, quite close to the source of the Brahmaputra. It takes a north-westerly course, passing through a series of stupendous gorges such as cannot probably be matched in any other part of the globe; the one by which the river bursts through the Himalayas is said to be no less than 14,000 feet in depth.

‘For miles at a time nothing but almost perpendicular crags can be seen between the river and the sky. On the so-called roads which penetrate these ravines one

has to scale cliff-sides by means of small wooden pegs let into the rock, or swarm up a tree-trunk leading from one narrow ledge to another twenty feet above it. In places one creeps along the face of a perpendicular wall



THE GATEWAY OF THE RESIDENCY, LUCKNOW, SHOWING MARKS
OF SHOT AND SHELL ON THE BRICKWORK

of rock, holding on to the slight crevices with fingers and toes, a fall of hundreds of feet being the consequence of a false step. Every now and again, in order to circumvent some impassable precipice overhanging the river, the

road abruptly ascends some six thousand feet or so, to descend again as steeply on the farther side of the obstacle.' After leaving the mountains the Indus is a broad and rapid stream, subject during the rainy season to sudden and disastrous floods; hence hardly any large towns are situated on its banks.

Its great feeder, the Sutlej, rises close to the main stream, but breaks through the mountains by a deep gorge to the east of Kashmir. It collects the waters of the Beas, Ravi, Chenab, and Jehlam, which with the Sutlej give the name to the Punjab, or 'land of the five rivers,' and joins the Indus after a course of a thousand miles. From this junction to the sea the river traverses the parched plains of Sind, where cultivation would be impossible but for the irrigation canals fed by its waters.

LESSON 15

THE RIVERS OF THE DECCAN, AND THE EUPHRATES AND TIGRIS

The plateau of the Deccan is mainly drained by six considerable rivers, the Mahanadi, Godavari, Kistna, and Cauvery, all flowing eastward to the Bay of Bengal, and the Narbada and Tapti, which, after draining two long and narrow valleys in the north of the Deccan, flow into the Gulf of Cambay. The upper courses of these rivers are all more or less obstructed by rapids, while in passing from the tableland to the coast plains

they flow through long narrow gorges. These circumstances, combined with their rapid currents in flood time, render them of but little service as means of communication between the rich lands of the Deccan and the coast. The waters of the lower courses of the rivers entering the Bay of Bengal are, however, largely drawn upon to supply an extensive system of irrigation canals, in which the flood waters are stored up for the requirements of the crops.

West of the Indus the only important river basin is that of the Euphrates and Tigris. Both rivers rise in the Armenian highlands, the Tigris flowing in a comparatively direct line for eleven hundred miles to the Persian Gulf, while the Euphrates, after flowing towards the west to within about eighty miles of the Mediterranean, turns south-east on its journey through the Mesopotamian plain, uniting with the Tigris about a hundred and twenty miles before reaching the sea.

In its upper course the Euphrates rushes through the deep valleys and precipitous gorges of Armenia, and after forcing its way through the Taurus Mountains emerges upon the Syrian plain. Here it flows through a narrow valley, a few miles in width, bordered by chalky cliffs on either side. Between the cliffs and the river lie meadows covered with flocks of sheep, dense growths of tamarisk bushes and reeds, the haunts of the wolf, the wild boar, and the jackal, and, in places, patches of cultivated ground where the settled Arabs, with the aid of irrigation, raise crops of corn, rice, and fruits.

Beyond the cliffs lies the desert, covered with

verdure in spring, upon which the Bedouins pasture their flocks and herds. Lower down the cliffs disappear, the desert comes close up to the river, and groves of date palms mark the only fertile spots.

The fertile, alluvial plain, through which both rivers flow before entering the Gulf, is a remarkable example of the way in which misrule and insecurity of life and property can change the aspect of a country. What was formerly one of the most highly cultivated regions in the world, supporting a great settled population, has now become a land of grassy steppes and barren wastes roamed over by wandering Bedouin tribes.

The only large town is Bagdad, on the Tigris, once the far-famed capital of the Caliphs, when their empire was at its greatest height of power, now evil-smelling and dirty, with its walls and mosques in ruins. It is, however, still a place of considerable trade, partly with the port of Basra, and partly as the calling place of the Persian caravans on their way to the holy cities of Mecca and Medina. From the uplands of Kurdistan goods are conveyed down the Tigris in a very primitive fashion. Rafts of timber are supported upon inflated goat-skins and floated down with the current. Upon arriving at Bagdad they are broken up and the boatmen return with the skins by caravan.

alluvial: deposits formed by	primitive: antiquated or old-
running water.	fashioned.

LESSON 16

IRRIGATION BY CANALS

It has already been shown that in Central and Southern Asia there are vast districts where the rainfall is very deficient, or where rain only falls at certain periods of the year. Hence from very early times canals, tanks, wells, and various other means of supplying water to the crops have been a necessity. Where these works have been carefully maintained and developed, as in parts of India, plentiful crops are assured, and districts formerly liable to the most dreadful famines are now never affected to any serious extent ; on the other hand, where they have been neglected, the once fruitful fields have relapsed into barren and depopulated wastes.

The advantage of a system of irrigation is not limited merely to the certainty of obtaining a regular and sufficient supply of water, but as the water drawn from the rivers contains a large amount of fertilising matter, the productiveness of the soil is greatly increased, cultivation is possible throughout the year, and more valuable crops may be grown in place of inferior ones.

Of the various systems of irrigation that effected by means of canals is the most important. Some of these merely carry off the flood waters and are known as inundation canals, others of later construction are perennial canals, taking nearly the whole water supply of a river for a considerable distance, and by means of branch distributing canals spreading it over large

areas ; for example, the Sirhind Canal in the Punjab, which is supplied from the Sutlej, is over 500 miles long, with distributing channels amounting to several thousand miles, while the Ganges canals intersect the whole of the district lying between the Jumna and the main stream.

The Zerafshan, a comparatively short river of Russian Turkistan, affords a very striking illustration of the astonishing crops obtained by irrigation. In Bokhara forty-three main canals are diverted from the stream, having a total length of not less than six hundred miles ; while at Samarkand, higher up the river, eighty-three main canals, with over nine hundred branches, carry the water to the fruit gardens and fields. These canals flow along terraces one above the other, their banks fringed with osiers and willows, and send off branches to each village, where the water is distributed over the fields, either directly or by waterwheels. Such are the fertility of the soil, the richness of the irrigation water, and the mildness of the climate ' that three crops are sometimes raised from the same plot in one year : the winter crop of wheat, barley, rye, or clover, sown in November and reaped in early spring ; the spring crop of maize, rice, sorghum, or cotton, sown in the spring and reaped in the early autumn ; and the autumn crop of turnips, carrots, or millet, sown in September or October and gathered in November.'

A marked contrast to this marvellous productiveness is furnished by the arid and barren hillsides of Western Tibet. Yet even in this unlikely land we may see surprising results from irrigation. Here little canals

bring down water from the high snows. Following the mountain sides for leagues their courses can easily be distinguished by the narrow belt of vegetation, nourished by the water as it flows on, the green line showing brightly against the bare hillside. But, you may ask, what is there to water in such a rocky country? Not much to be sure, but here and there in sheltered hollows the weathering of the rocks has formed a layer of soil. These tiny plots, when irrigated, are very fertile, and, as the following description shows, form little beauty spots in this gloomy, wild-looking land.

The little patch of granite dust watered from such a canal 'was about two hundred yards square, and was intersected like a chess-board with tiny irrigation-ditches through which the cold, clear, mountain water bubbled merrily. It was the greenest and freshest garden imaginable, and all the birds and butterflies for miles around appeared to have found this out and were collected in this pleasant place. Here were patches of young corn and deep grass full of flowers, among which the currant, gooseberry, and rose bushes grew luxuriantly, while willows and fruit trees afforded a grateful shade.'

perennial canals: canals containing water the whole year round.

rye: a hardy food stuff of the wheat family making a dark-coloured bread.

osiers: willows grown for basket making.

sorghum: a kind of millet.

weathering: the crumbling of the rocks due to the action of water, frost, wind, &c.

LESSON 17

IRRIGATION BY KANATS, TANKS, AND WELLS

On the Iranian Plateau, where there are few rivers, the supply of water is obtained from the mountains by a peculiar system of underground watercourses known as *kanats*. 'A kanat is a subterranean gallery conducting the water from its parent springs in hill or mountain to the village where it is required either to promote cultivation or to sustain life. The process of construction is as follows. Experimental shafts are first sunk until a spring is tapped in the higher ground. Then the labourer begins at the other end where the water is required at the surface, or at intervening points, and digs a trench or cutting on a very slightly inclined plane in the direction of the spring. As he goes farther and gets deeper underground, circular pits or shafts are opened from above at distances of twenty yards or more by which the excavated soil is drawn up to the surface and heaped round the mouth of the shaft. In time the subterranean tunnel reaches the spring, and the water flows down the nicely calculated slope to its destination. The shafts are subsequently used to keep the gallery clear and free from obstruction. A village with any extent of cultivable soil is therefore, as a rule, the point from which radiate a number of kanat lines, often several miles in length, to the nearest mountain, the long succession of shafts resembling an array of prodigious mole-hills thrown up one after another across the plain.'

Over the greater part of Southern India, where the river channels are too deep below the surface for their waters to be used for irrigation, and where the rainfall comes in heavy bursts, several inches sometimes falling in one night, the water is stored up in artificial lakes called tanks. Thousands of these reservoirs are dotted all over the district, but they rarely contain more water than suffices for a year's supply. Hence a falling-off in the usual supply of rain means a limited amount of cultivation, and the consequent liability to the terrible famines to which these districts are unfortunately subject.

In other parts, such as Arabia and the district along the base of the Himalayas, there is a natural storage of water underground. The rain sinks into the porous soil until it reaches a bed of rock, where it is retained, and from which it can be obtained by means of wells.

‘There are three methods of applying the water in tillage. For such plants as cotton and tobacco it is brought through the field in small ditches, and allowed to filter through the soil. For rice the fields must be kept submerged for a considerable time at different periods. For wheat, when an even distribution of water is necessary, the field is usually divided into squares by small walls of earth a few inches high. When these squares are filled with water the opening from the canal is closed, and the water is left to soak in.’

Generally the supply of water is regulated by the Government, officials being appointed to attend to the irrigation works and to determine the amount of water due to each village or cultivator. The water is distributed over the fields by various methods. Where

possible a natural fall is secured ; in other cases water-wheels, chain-pumps, and other devices are employed. In India oxen and buffaloes are used to work the water-wheels and pumps ; but in China, where labour is plentiful and cheap, the work is mostly performed by coolies.

LESSON 18

PLANTS AND ANIMALS OF THE PLAINS AND THE TABLELANDS

Over such a vast continent there is of necessity a wonderful variety of plant-life, ranging from the gigantic banyan of India, whose wide-spreading branches sometimes cover acres of ground, to the diminutive birch of the north, so small that several full-grown trees would lie on the page of a reading-book. As the vegetation chiefly depends upon the climate, so the animal life is largely dependent upon the vegetation ; hence the cold plains of the north, the arid tablelands of the centre, and the hot and well-watered countries of the south and south-east all have to a great extent their own distinctive plants and animals.

The northern plain presents three well-defined regions—tundra or frozen marsh land, forest land, and steppe land—each with its characteristic plant and animal life. On the tundra hardly anything grows except mosses and lichens, which, however, supply the reindeer with the food it needs. This useful animal is as necessary to the hunters and fishermen of these dreary wastes as the camel is to the dwellers of the desert. It

is the chief means of transport, its milk and flesh are important articles of diet, and its skin is used for clothing and tent coverings. Of wild animals the white bear of the Arctic seas is the fiercest, while the hare, the fox, and the wolf are the most common.

In the forest region the higher grounds are covered with birches and tall conifers, such as pines, firs, and larches; while the streams are fringed with willows, alders, and poplars. A striking feature of this region is the great number of edible berry-bearing plants: raspberries, red and black currants, strawberries, blackberries, cranberries, bilberries, and many others furnish food for man and beast, while great quantities are gathered and preserved for winter use. Here also are the homes of valuable fur-bearing animals, such as sables, ermines, red, black, blue, and silver foxes, and dark grey squirrels. So persistently, however, are these creatures hunted that many of them are becoming exceedingly scarce.

On the steppe-lands and grassy plains enormous numbers of sheep, cattle, and horses are reared, while on the fertile black earth of Western Siberia rich crops of wheat, barley, rye, oats, and other cereals are raised.

The central zone, which includes the uplands from the Mediterranean to the Pacific, together with the lowlands lying around the Aral Sea, is characterised generally by an absence of trees; true, in places where the rainfall is abundant the mountain slopes are clothed with forests, but as a rule grasses and flowering plants are the chief forms of vegetable life. The people are nomadic and pastoral, and camels, sheep, goats, horses, asses, and yaks form their chief wealth.

The camel is by far the most generally useful beast of burden, being equally at home on the burning sands of Arabia, the boundless Kirghiz steppes, the wind-swept tablelands of Mongolia, and even on the freezing uplands of the Pamir.

Of the sheep the most important are the fat-tailed



Photo : W. Roe

ANGORA GOATS

Graaf Reinert

varieties. In the steppe sheep the fat is developed on each side of the short tail, spreading like a bag over the upper part of the hind legs ; in another kind the fat forms in the tail itself, which sometimes becomes so heavy that it has to be supported on a small carriage

fastened to the sheep. In time of famine this fat diminishes and sometimes disappears, just as the hump of the camel grows less when the animal is not well fed.

Many of the goats are noted for their long silky hair. Those of Tibet furnish a soft down, which grows in winter under the outer hair, and from which the finest Kashmir shawls are made. The large goats of the Kirghiz supply the long hair for the so-called Orenburg shawls, while the fine fleecy hair of the Angora or shawl goat is an important export from Asia Minor and Persia.

The yak, a kind of ox with long hair and a bushy tail, is the most useful domestic animal in Tibet and the adjacent uplands, supplying food, milk, and clothing. It is also used as a beast of burden, and when well fed will carry a heavier load than a pack-horse. A yak caravan sometimes includes over a thousand of these useful animals.

In the desert regions the scanty vegetation is very remarkable. The plants, adapting their growth to the peculiarities of the soil and climate, present many curious features. Some plants are destitute of leaves; in others the leaves are very small and few in number, while most are protected with spines and prickly thorns. The stems are generally thick and fleshy, and covered with extremely hard bark, well adapted to resist either the parching effect of the dry hot air or the fury of the fierce blasts which sweep over these unsheltered plains. The roots descend deep into the soil in search of moisture, the sap is gummy and resinous, while a pungent taste and aromatic odour are common to them all.

Where, however, there is a plentiful water supply vegetation is luxuriant. The slopes of the Caucasus and Elburz ranges are clothed with dense forests of magnificent trees, the oases of Arabia are crowned with clustering palm trees, and generally throughout the tablelands of the south-west, wherever irrigation is carried on, corn and excellent fruits are produced in abundance. The peaches, apricots, and plums of the Iranian Plateau, the grapes and figs of Asia Minor, the dates of Mesopotamia, and the melons of Turkistan cannot be surpassed for their delicious flavour.

edible : eatable.

Orenburg : an important town on

the Ural, formerly the centre of
administration for the Kirghiz.

LESSON 19

THE PLANTS AND ANIMALS OF THE MONSOON DISTRICT

The south-west or monsoon region includes the great peninsulas of India and Indo-China, China Proper, Japan, and the great islands enclosing the China Sea. Here the copious rainfall favours the growth of a luxuriant vegetation, but so thickly peopled is the greater part of this region that large tracts of forest land are comparatively scarce. Indo-China, the great islands to the south, the rainy slopes of the Western Ghats, and the Himalayas are the only districts where great forests still remain.

These forests are the haunts of a wonderful variety of animal life. Here are found great herbivorous or

plant-eating animals, such as the elephant, the rhinoceros, the bison, the buffalo, and numerous species of deer, together with fierce carnivorous or flesh-eating animals, such as the tiger and the leopard. Troops of monkeys and large apes live in the trees, while the undergrowth is infested with snakes. The largest of these reptiles is the python, sometimes exceeding twenty feet in length, and powerful enough to crush a small deer in its folds. The most dreaded is the deadly cobra which does not measure more than four feet. Some idea of the number of venomous snakes may be gathered from the fact that in India alone about twenty thousand persons die from snake-bites every year.

The bird life of this region presents a greater variety perhaps than any other part of the world, almost every species being represented. Among the most gorgeous are the parrots, while the magnificent gold and silver pheasants are common from the Himalayas to Japan.

Insects of many kinds swarm in incredible numbers, the heat and moisture being especially favourable to their development. Plagues of flies, mosquitoes, destructive moths and ants, together with many other noxious pests, render life at certain times and in some places almost unbearable. Clouds of locusts, sometimes miles in length, occasionally appear, consuming every green thing and making the country over which they pass to look like a desert.

Of the cultivated plants rice is the chief crop of the plains in the monsoon district, especially in the great river deltas and the low-lying lands near the coast. The rice fields are embanked to retain the water as long

as it may be needed, and where the rains or the overflow from the rivers do not suffice to flood the fields the water must be supplied by irrigation. It is a most productive crop, and the districts where it grows are the most densely peopled parts of Asia. In Bengal two crops are obtained every year, sometimes from the same land. About one-third of the people of India, three-fifths of the people of China, and almost the entire population of Japan, Java, and Indo-China, making in all over four hundred millions of people, live chiefly on this useful grain.

Next in importance as food plants come millets, wheat, and pulse, of which the chick-pea is the most important. In India millet is grown more widely than any other crop, and forms the chief food plant of a great part of the population. The sugar cane, the tea plant, the cotton plant, oil seeds of many kinds, and the mulberry tree for silkworm rearing are grown pretty generally throughout. Of the plants confined to special localities, the spices of the great islands of the south-east, the opium of India and China, and the indigo and jute of India are among the most important.

As this region is mainly agricultural, there is not so great a number of grass-eating domestic animals. The most important are oxen and buffaloes, used in agricultural operations all over the south-east of Asia, and the elephant, which is confined to the two great peninsulas.

chick-pea : a pod plant producing a very nutritious seed.

LESSON 20

THE YELLOW RACE AND THE WHITE RACE

You have already read that more than half the people of the globe live in Asia. Still, though living in the same continent, they are not of the same family, but consist of two great divisions differing one from the other in many respects. A line drawn along the Himalayas and the continuing ranges to the southern end of the Caspian Sea broadly divides these two stocks. To the north of this line the people chiefly belong to the Mongolian or 'yellow' race, while on the southern side they are mainly of the Caucasian or 'white' race. It must not be imagined, however, that all Caucasians are white; the term refers more to the general features than to the colour of the skin. Thus, owing to the hot climate, most of the Caucasians in Asia are dark, and in some cases nearly black.

The 'yellow' race are generally distinguished by yellowish-brown skins, coarse, straight, black hair, flattish faces, and black eyes set slightly oblique. On the whole, they are rather short in stature, though many tall persons are found in some of the groups. There are two great branches of the race—the Chinese, which includes Japanese, Tibetans, and most Indo-Chinese; and the Mongol-Tartar, which comprises the various tribes scattered over Asiatic Russia and the northern part of the Chinese Empire. The former are mostly settled, and engaged in agriculture or trade. The latter

are largely nomadic, living as shepherds, herdsmen, and hunters.

The 'white' race in Asia is also divided into two main branches—the Aryan, chiefly made up of Hindus and Persians, and the Semitic, of which the Arabs are the chief type. Like the 'yellow' race, the people are settled or nomadic according to the nature of the soil and climate, tilling the ground in the well-watered valleys and plains, or rearing cattle and sheep on the more arid uplands.

At the present time the bulk of the people of Asia are followers of either Buddhism, Brahmanism, or Muhammedanism. Buddhism is most largely professed among the Mongolian race, but it is often intermingled with the more ancient worship of ancestors and spirits known as Shamanism. In China, for example, probably more respect is paid to the worship of ancestors than to any other form of religion. Brahmanism is followed by over two-thirds of the inhabitants of India, while Muhammedanism is the belief of the people of Arabia, Turkey in Asia, Irania, and Turkistan, together with nearly sixty millions in India.

The Jewish and Christian religions, which originated in Asia, have now but few adherents there. An ancient, and at one time a very important, religious belief, that of the Persian 'fire-worshippers,' still has a few followers in Persia and a small but very influential following in India. There the Parsis, the descendants of those Persians who fled when their country was conquered by the followers of the Prophet, have preserved their ancient faith to the present day. They do not allow the bodies

of their dead to be buried in the ground, as they believe that the earth should not be contaminated by any decaying matter. Accordingly they expose the dead body upon funeral towers, usually spoken of as the 'towers of silence.' These towers are round, but not very high, and are uncovered. Inside there is a stone platform running all round, with three sets of grooves sloping downwards towards a deep empty well in the centre. The outer circle of grooves is for men, 'good actions'; the second line for women, 'good words'; and the third for children, 'good thoughts.' When a person dies the body is placed on an iron bier and carried by official corpse-bearers, accompanied by a procession of friends and mourners, all walking, and all kept together by holding the ends of white pocket handkerchiefs between them. When they reach the place the friends stand at a distance from the tower, the corpse-bearers strip the corpse at the entrance, and place the body, naked, in one of the grooves. The vultures are all sitting on the trees and walls watching, and in less than five hours after they have reduced it to a skeleton. In about eight days the bones are completely dried up, and they are then lifted with tongs and thrown into the central well, where they crumble away into dust. The rain washes down into this well and gradually carries all away into drains provided for the purpose. These drains have large filters at either end so that when the water reaches mother earth there is no contaminating matter in it.

LESSON 21

NEW HIGHWAYS IN ASIA

The lofty tablelands of Central Asia, with their sterile deserts and steep escarpments, have always proved great obstacles to through communication. Traffic between either the northern and southern, or the eastern and western parts of the continent is equally difficult, and there are few tracks which can be traversed without meeting with many impediments.

It is only in India, Asiatic Russia, and Japan that there are any extensive railway systems. In India the country is pretty well covered with railways, which afford rapid communication between all the important centres. In addition there are thousands of miles of good metalled roads, as well as those great water highways, the Ganges, Brahmaputra, Indus, and Irawadi, which with the numerous canals are still largely used for inland traffic.

In the Russian dominions means of transport have developed wonderfully of late years, and there is now continuous steam communication between St. Petersburg and the shores of the Pacific. The most important road is the great Trans-Siberian Railway, which passes through Omsk, the capital of Western Siberia, crosses the Yenisei at Krasnoyarsk, the centre of a gold-mining district, and reaches the most important town in Siberia, the great trading centre of Irkutsk. Here the first break occurs, and at present the trains are ferried over Lake Baikal, the route being kept clear in winter

by means of powerful ice-breaking steamers. From the other side of the lake the line is continued to Sryetensk, a small town on a tributary of the Amur. From this point steamers ply down the river to Khabarovsk, whence the railway is again continued to the port of Vladivostok. Owing to the very difficult nature of the country along the Amur valley, a line is now in process of construction across Manchuria, with a branch



to Port Arthur, the important harbour which the Russians have lately acquired from the Chinese.

This railway has, to a great extent, taken the place of the great *trakt*, or road, which extends from the Urals to the Pacific, and along which have passed the weary feet of thousands of banished Russians on their long and toilsome journey to the mines of Eastern Siberia. From Irkutsk a branch of this great highway leads to the

important trading station of Kiakhta, through which pass the tea, silk, and rhubarb caravans from China. Here in the courtyards of the merchants may be seen stacks of clear transparent ice piled up in the shade, forming the water supply of the traders during the winter.



TIFLIS. TOWN AND FORTRESS

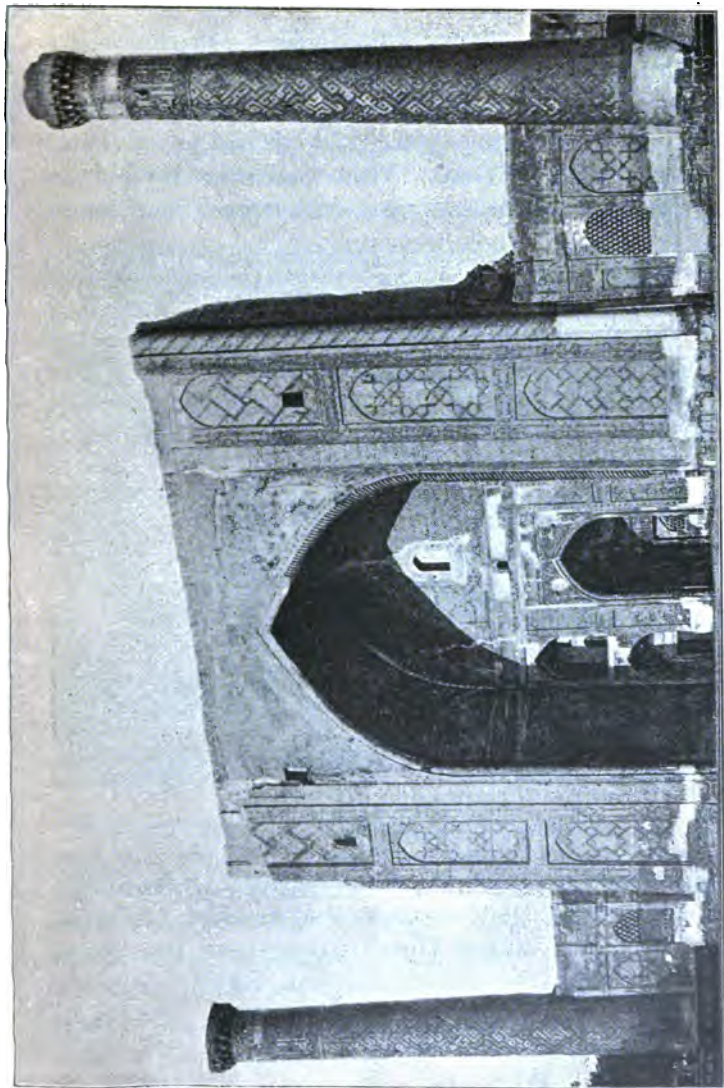
Further south another famous route leads from the Black Sea right into the heart of the continent, opening up what was formerly one of the least known parts of Asia. From the harbour of Batum the Trans-Caucasian Railway runs through the important city of Tiflis to the great petroleum port of Baku. From this town a voyage of about two hundred miles across the Caspian brings the traveller to the starting point of the great

Trans-Caspian line, the chief means of communication in Turkistan.

For nearly five hundred miles the line passes through the desert, where the shifting sands and the scarcity of water are the great difficulties. Oases are few and far between, the ancient Turkoman settlement of Merv being the most fruitful.

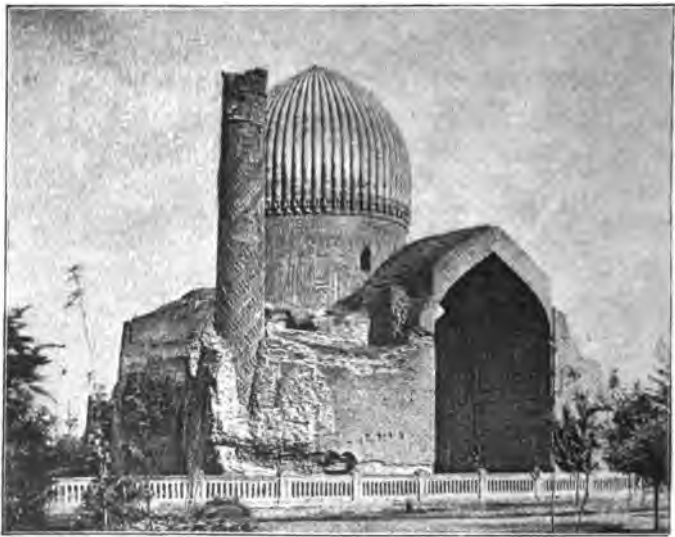
After crossing the Oxus, however, the aspect of the country undergoes a wonderful transformation: clumps of trees, orchards of mulberries, figs, vines, and peaches, plantations of cotton, corn, and melons indicate a country of the richest fertility. An Arab traveller, writing nearly a thousand years since, says: 'In all the regions of the earth there is not a more flourishing or a more delightful country than this. If a person stand on the Castle of Bokhara and cast his eyes around he shall not see anything but beautiful green and luxuriant verdure on every side, so that he would imagine the green of the earth and the azure of the heavens were united.' Soon the minarets and domes of the celebrated city of Bokhara appear above the trees. Its vast bazaar, its colleges, mosques, and numerous shrines, still remind the traveller of its ancient renown, 'when students flocked to its universities and pilgrims crowded its shrines; when well-built canals carried streams of water through the city; luxuriant fruit trees cast a shadow in its gardens; its silk-worms spun the finest silk in Asia; its warehouses overflowed with carpets and brocades; and the commerce of the East and West changed hands in its markets.'

From Bokhara we pass on to Samarkand, one of the



RUINS OF A MEDRESSE, OR RELIGIOUS COLLEGE, AT SAMARKAND
(From 'Russia in Central Asia,' by Lord Curzon)

oldest and most romantic cities in Asia. In the centre of the town is perhaps the finest public square in the world, surrounded by magnificent and imposing buildings, once glittering with gold and adorned with gorgeous enamelled tiles. These vast ruins remind us of the time when the great conqueror Timur made



THE TOMB OF TIMUR OR TAMERLANE

(From *'Russia in Central Asia,'* by Lord Curzon)

Samarkand the capital of an empire reaching from the Ganges to the Mediterranean on the one hand, and from the Arabian Sea to the Siberian steppes on the other. Here in 1405 the old warrior was buried, and the building covering his tomb is still one of the most interesting ruins in the city.

Leaving the well-watered gardens of this interesting city the line crosses the Sir and reaches Tashkent, the largest town in Turkistan. The city covers a vast area, really consisting of two towns—the native and the Russian—the former with narrow streets and poor buildings, its densely packed population comprising representatives of almost every people in Central and South-western Asia; the latter with wide streets, spacious gardens, numerous public offices, and swarms of Russian soldiery. From Tashkent it is proposed to continue the line along the Sir Valley to Orenburg on the Ural, thus giving direct communication with the European railway system.

escarpment: the steep face or edge of a ridge.

shrines: sacred places.

enamelled: glazed.

minaret: a slender tower attached

to a mosque, from which the call to prayer is made.

brocades: silk and other stuffs woven with gold or silver threads, or ornamented with raised patterns.

LESSON 22

INDIA: POSITION AND INHABITANTS

India forms one of the most compact regions in the world, few other countries possessing such strong natural defences on their frontiers. The northern border is protected by the double and triple lines of the majestic Himalayas, the eastern by range after range of mountains rising from deep and narrow valleys, the western by lofty mountains and barren wastes. This western border is the side from which at various times India has

been invaded, but even here the passes are few and not easily traversed. Elsewhere the sea forms a boundary which can be defended by a strong naval power.

But though so clearly cut off from the neighbouring countries, India has never been completely under one rule. Different races, speaking different languages and professing different religions, make up its three hundred millions of people.

These races have entered the country at various periods, the new invaders in some cases driving the older races into the southern highlands, in other cases settling among them, and in time becoming so intermingled with them as to be no longer distinguishable as a separate race.

The oldest of the peoples who have lived in India are now to be found in the wild districts of the Vindhya and Satpura Hills, and in the Western Ghats, where some of them are still little better than savages. Then came the people who now form the bulk of the inhabitants of the Deccan, while they in turn were followed by the Hindu Aryans of the northern plain, who are of the same stock as ourselves.

In order that these last invaders might not be absorbed by the more numerous subject races, the system of *caste* was introduced. The Aryan conquerors were divided into three classes: the Brahmans or priests, the Rajputs or warriors, and the Vaisyas or traders and farmers. The conquered races were termed Sudras or serfs, while those who took refuge in the hills and refused to submit were termed Pariahs, a term which at first meant 'hillmen,' but was afterwards applied to

those who were 'out-castes,' that is, shut out from the benefits of the caste system.

The Sudras are again subdivided into numerous classes, every trade and occupation forming a separate caste. The members of these various sects are forbidden by the Hindu religion to intermarry or to eat and drink together. A high-caste Hindu will not eat with one of an inferior caste, nor will he even partake of food which has been prepared by anyone of lower caste than himself. Caste is not, however, a question of wealth or even rank; a rich man may belong to a low caste, while his servant may belong to a high one, but whatever caste a man is born into there he generally remains.

After the land had been settled by these races a series of Afghan and Turkish invasions introduced the Muhammedan religion, which is now followed by about one fifth of the total population. In 1526 the Mongol conqueror Babar, a descendant of the still more famous Timur, invaded India and established himself at Agra. His grandson, the great Akbar, who reigned during the time of our Queen Elizabeth, consolidated and still further increased the great Mogul Empire, which lasted, in name at least, to the year 1857.

At the present time the whole of India and Burma is either directly under British rule or ruled by native princes more or less under British influence.

Aryans: the main branch of the times spoken of as Indo-European.
Caucasic or 'white' stock, some-
Mogul: another form of Mongol.

LESSON 23

PLANT LIFE IN INDIA

India is essentially an agricultural country, the greater proportion of the people being engaged in occupations connected with the soil ; hence the widespread distress when the rain-bearing monsoon does not bring its usual supply of moisture. A falling off in the amount of rain means a diminished amount of water stored up for irrigating the crops during the dry season, and consequently a smaller amount of land under cultivation.

There are two harvests in the year, but not usually from the same fields, some crops ripening in our summer and others in our winter. The crops grown are termed wet crops and dry crops, the former requiring a constant supply of water while growing, while the ordinary rainfall is sufficient for the latter.

You would naturally expect that in a country of such great extent there would be a great variety of vegetable products. This is so ; but while some crops, such as millets, pulse, oil-seeds, and in a lesser degree cotton, sugar, indigo, and tobacco, are grown almost everywhere, others such as rice, wheat, opium, jute, tea, coffee, cinchona, and pepper flourish only in certain localities where the soil, water supply, and climate are especially suited to their needs.

Millet is probably the most productive grain in the world. There are several kinds used as food both

for man and beast, of which the great millet, the spiked millet, and the small millet are the chief: these



A TALIPOT PALM

together with the chick-pea and vegetables form the chief food of the farming population.

Oil-seeds, such as linseed, mustard seed, rape-seed,

and sesame, are grown extensively both for export and for home use, oil being largely in demand for application to the body, for cooking purposes, and for lamps. The oil-presser is an important person, and the grating of the oil mill a familiar sound in almost every Hindu village.

In the river deltas and well-irrigated plains rice is the most important crop. The plant grows best on flooded land; one variety cultivated in Bengal will grow in flood time in several feet of water; on the other hand there are kinds which will flourish as dry crops.

Sugar is obtained from the sugar cane, and also from the sap of several species of palms, the date palm in Bengal, the cocoa-nut palm of the coast, and the Palmyra palm of the south affording the most abundant supply. The last-mentioned tree, growing in a somewhat dry region, sends its roots deep into the ground, gathering up the moisture and yielding quantities of 'toddy' as the sap is called. Twice a day the industrious toddy-drawer¹ climbs up the slender stem to collect the sap, some of which is made into sugar, while from the rest a fiery spirit called *arrack* is distilled.

Indigo, though a very general crop, is most extensively cultivated in Bengal. When gathered the leaves are steeped in vats until fermentation takes place, after which the liquor is run off into a second vat, where the particles of dye are allowed to settle. This sediment is then boiled, strained, and made up into cakes for use.

Jute is mainly a product of Bengal, growing where the soil is annually enriched by the floods of the Ganges. The plant grows to a height of from eight to twelve

¹ See p. 134.

feet, and when cut is tied up into bundles and steeped in water until rotten. The long silky fibre is then extracted and put to a variety of uses. Great quantities are exported to supply the mills of Dundee, while much is woven into gunny-cloth for the making of the sacks in which so many Indian products are packed.



THE GREAT BANYAN TREE IN THE BOTANICAL GARDENS, CALCUTTA

Cinchona is the name given to several species of plants whose bark is of great use as a medicine. The tree was once entirely confined to South America, hence its name of 'Peruvian bark,' but it is now grown in great quantities in India and Ceylon. The extracts made from it, of which quinine is the chief, are in-

valuable as remedies against the malarial fevers so common in tropical climes.

Among the more useful forest trees of India are the strong and durable teak, the stately deodar or Himalayan cedar, the ebony and sandal woods of the south-west, the various palms, the gigantic banyan, which sending down roots from its branches forms fresh stems until a single tree becomes a grove, sometimes covering acres of land, and, above all, as far as general utility is concerned, the feathery bamboo, which in places grows to the height of one hundred feet.

cinchona : *pron.* sin-ko'-na.

pulse : plants like peas or beans in which the seed is contained in pods.

linseed : flax seed.

rape-seed : seed of plants of the cabbage kind.

sesame : the richest of the oil-seeds. The herb grows from two to four feet high.

LESSON 24

ANIMAL LIFE IN INDIA

Though much of India is so well cultivated and thickly peopled, there are other parts, such as the great forests of the hill-sides and the extensive jungle of the plains, almost entirely given over to wild beasts. One of the largest of these tracts is the belt of jungle lying at the foot of the Himalayas known as the Terai, a dense mass of steaming vegetation probably left by the husbandmen of the plain as a protection from the ravages of the plundering hill tribes.

These forests and jungles, which often approach closely to the villages and towns, are the haunts of many

destructive wild beasts, such as the tiger and the leopard, together with a wonderful variety of antelopes and deer upon which they prey. Here, too, hide those scourges of the sheep flocks—the savage wolf and the cowardly



A STATE ELEPHANT

hyena. They also shelter the bear, the wild pig, which does more damage to the crops of the natives than any other dweller of the jungle, several kinds of wild oxen, one species standing no less than seven feet in height,

buffaloes of great strength and ferocity, the rhinoceros, and, monarch of all, the mighty elephant.

The wild elephant is now chiefly found in Assam and the forests of the Western Ghats. Owing to its growing scarcity it is protected, and the capture of the elephant is reserved to the Government. When an elephant hunt is decided upon, a huge enclosure is formed in the forest and the hunters frighten the animals towards it. When captured each wild elephant is generally placed with two tame ones, who gradually make him docile and obedient. They are used for carrying and moving heavy weights and for tiger hunting; while most of the native princes and great men keep them for show, using them in religious processions and state ceremonies.

The sandy deserts of Kutch still afford food and shelter for numbers of wild asses; while in the higher parts of the Himalayas sheep, goats, and yaks, both wild and tame, are the principal animals.

Of all the animals of India snakes cause the greatest loss of human life. Many kinds are harmless, but the bite of the cobra is rapidly fatal. They abound in the thick undergrowth, and often enter the houses during the heavy rains; and although rewards are offered for the killing of noxious reptiles, the annual loss of life from snake bites does not appear to decrease to any great extent.

Insects, too, of all kinds are a great plague. Locusts, which are found chiefly in the drier parts of the country, and white ants, which abound everywhere, are the most destructive; flies and moths swarm, and stinging mosquitoes render sleep an impossibility without the

protection of a net. All, however, are not harmful : the bee, the silk-moth, and the lac insect are of very great utility.

lac : a resinous substance produced on trees by an insect. It is used | in the manufacture of sealing-wax, dyes, and varnishes.

LESSON 25

AN INDIAN TOWN

The busiest street of a large Indian town presents a wonderful contrast in its calm and quiet compared with one of our large towns. The unpaved sand or loam of the broad or narrow passage between the shops and houses gives back no echo to the footfall of the men, and cattle, that traverse it. The men wear clean, becoming robes of white or grey, with brilliant turbans surmounting their neat, cool attire—turbans of purple, lilac, sky-blue, rose-red, green, and amber—and the women draw over their smooth black brows and shapely shoulders a long piece of cloth, called a *sari*, of the loveliest tints, bordered with rich patterns and threaded with gold and silver embroidery, or inlaid with little flashing plates of glass and pearl-shell.

The bare feet of the women and children and the sandals of the men and boys create no noise, and the sleepy patient animals in the ox-carts go up or down the highway with broad noiseless hoofs, and light loads of sugar-cane, fodder, or cotton, disturbing the long and warm midday lull with nothing louder than the chafing of the wooden yoke-beam or the creak of an ungreased

wheel. The boys are not noisy, but go about their games or errands gravely and silently. The traders in the shops do not shout out, and never advertise their wares. Quiet and dignified, they squat alongside their goods, and while calmly awaiting customers, they smoke the drowsily bubbling hookah or leisurely balance their accounts with a reed pen or upon the abacus.

Nobody is in a hurry. In every corner the palm tree lifts its stately feathered head, its waving plumes rustling in the cooling breeze; the banana hangs its broad green flags over the white house walls and window lattices. The meanest huts are adorned with the Indian convolvulus with its great bells of blue and white, or splendid yellow lupins; while as likely as not there will be monkeys sitting upon many a housetop.

Little striped squirrels run up and down the doorposts of the grain-seller's shop; the sacred cow from the nearest temple wanders by each store of open corn and pulse, putting her privileged muzzle into the rice-bags; the green parrots flash up and down the mid-street with a lively clamour; and the great black bats—the flying-foxes—hang in hundreds by their hooked wings from the bare fig tree.

You can hear, amid the full tide of the city's traffic, the 'swash' of the clothes being washed and beaten at the tank, and the scream of the kites as they circle round and round in the pale, clear sky overhead. The loudest sound in the long, thronged, lively but peaceful street will be the *ekka* rumbling along on two ponderous wheels with some merchant's family, its oxen and its red curtains all covered with bells, which jingle not

unmusically ; or some half-naked religious beggar blowing his big copper trumpet or beating his cymbals for alms.

The most important buildings in the city will be the temples and palaces. The temple will probably be gay, stately, and beautiful, and the palaces of the Maharajah will often be very sumptuous, outside as well as inside.

Notice as we enter the walls of this inner town how the heavy gate-doors, hundreds of years old, are studded with six-inch long spikes of iron. That is a relic of old-world fighting, when elephants were always sent first to batter down the gates of fortresses with their foreheads ; and the only way of preventing the great beasts from bursting in a four-inch oak slab was to put a set of sharp spikes upon it. Even elephants, it was found, soon had enough of ramming a front door fitted up in this style. At the entrance of the palace are Rajput soldiers—dark warriors of an unmistakable fighting breed. Along the road leading to the palace front you may see several hunting leopards lying on their bedsteads lightly chained.

It is a favourite sport of the native princes to pursue the black antelope with a trained cheetah. The leopard is carried, in a condition of sharp hunger, to the open deer-country upon a peasant's bullock-cart, and when the antelopes are sighted, the cart is carefully driven in a circle nearer and nearer to some fine buck with good long horns, until the animal is brought within reasonable distance. Then the hood is taken from the beast, whose savage eyes soon fasten upon

the deer. The leopard, set free, slides down like a ferret from his straw bed on the cart, and worms his way unseen, through rocks and bushes, until he has drawn near enough for a final rush, which he makes like a lightning flash, generally surprising and seizing the buck before it can gather itself together for escape. If the deer manages to get away, the cheetah makes no further attempt to follow it, but sulks in the thicket and is very difficult to catch again. But if it succeeds in striking down its prey, the hunters hurry up, and while dragging the growling savage jaws away from the bleeding haunch or neck of the deer, they slip into the crimsoned mouth of the brute a fresh cut joint of a goat or calf, and the leopard, thus deceived and pacified, is soon secured again and placed upon the vehicle.

(Adapted from 'Wandering Words,' by kind permission of Sir E. Arnold.)

hookah: the Indian water-pipe

abacus: a ball frame used for counting.

LESSON 26

THE JUNGLE AND THE VILLAGE

Although near main and well-frequented roads, this jungle country of the Western Ghats is as wild and secluded in many parts as the heart of a wilderness. From the lonely pools that lie at the foot of the hills the Indian plover rises, as you pass, with its strange cry which sounds like 'Did you do it? Did you do it?' Now and again a family of monkeys will cross the forest path, the old man of the four-handed household

angrily chattering at the sight of strangers, while the child-monkeys jump upon the backs or breasts of their hairy mothers, where they will nestle quite securely while she jumps down a precipice or up into the fork of a tree.

In the sandy patches you may come upon a mon-goose watching for snakes, or a porcupine; quails start from almost every tuft with a sharp whirr of their little mottled wings; and the cream-coloured jungle-dove coos soft love-notes in every milk-bush.

You will sight no black buck in these uplands, but, possibly enough, you may start a ravine-deer, and perhaps a sambar, the noblest of Indian deer. Yet the underwood conceals many other and fiercer animals. The bison roams the neighbouring hills, and the bear is always to be found there; wild cats and leopards live in many a hidden cavern of the rocks; while at night you will not pitch your tent in any region of the district without knowing by their cries that the hyenas reside there and the red fox, and, as a matter of course, the jackal.

But the true owner and landlord of many a tract of country in these parts is that gold-coated and dark-striped tyrant of the woods, the tiger. There are large ranges on the Ghats which are owned, at least for a time, by a pair of tigers, or it may be by an old male tiger singly, or by a tigress which has been left alone to take care of herself and her cubs.

On the plains, where the country is open, tigers never stay long in one place, or they are likely to pay with their hides if they do; but on the shoulders of the

hills, surrounded by the fringes of the forest, the striped rajah of the forest is often master of the situation, and takes tribute from the cattle, goats, and dogs of the villages, till he can be trapped or poisoned, or until he departs elsewhere.

It is not so bad for the country people as long as he retains his natural dread of man ; but once he lays this dread aside, he then becomes truly formidable. When he has tasted man, he neglects no further opportunity, and becomes step after step a confirmed 'man-eater,' often killing many of the villagers before he is hunted down.

The villages in this part of the Deccan are pretty much alike, the larger ones will, perhaps, have rather imposing ramparts and towers made of mud, with a gateway regularly closed at night, which keeps out robbers and wild beasts, and may sometimes even be defended by armed men against troops. But the ordinary jungle village is either open to the plain and forest, or has at best a fence of dried thorn-bushes, cut and piled around it, through which there will probably be many gaps.

The huts within, of mud and wattle, ranged in a long dusty lane, or perhaps in a square, possess very flimsy wooden doors, sometimes only a hatch and a curtain. There will generally be seen an old tree in the middle of the village and a little temple, perhaps only a mere porch built of sun-baked bricks and timber, approached by steps and open on one side.

Ordinarily you would know you were coming to the village by the buffaloes trooping home, and as likely as

not by lines of villagers entering with wood or fodder, as well as by the sounds, from the little abodes, of cotton bows twanging in the hut, where the peasant is fluffing his cotton before cleaning it in the *gin*; of the blacksmith beating his copper into shape for the *lotah*, or cooking utensil; of the women singing the mill-stone song as they grind the food for the evening meal; or of the housewife driving backwards and forwards the beam of the hand loom.

If nobody should be at work you would be sure to hear the beating of the tom-toms from somebody's house or kinsfolk feast; there would be a wall-eyed, shiny-hided buffalo wallowing in the village tank, a few white egrets stalking about its edge, a vulture perched upon the tree in the square, and much cawing of crows watching for bits of *chupatty* from the hands of the little naked children.

(Adapted from 'Wandering Words,' by kind permission of Sir E. Arnold.)

mongoose: a small carnivorous animal living on vermin and reptiles, especially valued in India as the inveterate foe of the cobra and other snakes.
egret: a kind of heron.

hatch: a half door.
gin: a machine for separating the seeds from the cotton.
chupatty: a small cake of unleavened bread.

LESSON 27

INDIAN CITIES. I.—CALCUTTA

We came up the Hooghli with a flowing tide and were glad enough when we reached Calcutta, for the passage up the river was not exactly a pleasure trip. The lower part of the river is impeded by sand-

banks that are constantly shifting, and the greatest care has to be taken. Many a gallant ship has been lost on these deadly sands, for the current is so strong that if a ship strikes a bank nothing can save her.

From the ship's bridge we had a splendid view of the vessels as we slowly steamed up to our berth. Here



SHIPPING AT CALCUTTA

was a fleet of great floating tanks laden with kerosene from the United States. A little further and we passed the beautiful sailing ships—three and four masters—that bring thousands of tons of salt every year to Calcutta, and carry away jute and rice. Towards the Howrah Bridge there were scores of steamers, from the

stately P. & O., or British India liners, all spick and span with white awnings and fresh paint, to the grimy and travel-stained tramp.

Close by was a fleet of native craft, their dusky crews gently pulling at the long, scoop-like paddles, and the steersman squatting in a pulpit-like structure in the stern ; while darting hither and thither across or with the stream, and in and out among the shipping, were the small passenger boats plying for hire. Perhaps the most curious craft were the river steamers, looking like floating warehouses, which find their way up and down the many mouths of the great river and penetrate into the interior as far as the borders of Assam. It was a wonderful scene of busy life, and as we gazed over the river with its hundreds of ships loading or discharging cargoes, and saw how the English flag predominated, we began to get some idea of the vastness of the Empire's trade.

It was early in the afternoon when we landed, and leaving our luggage to be taken to the hotel by our servants, we made up our minds to begin our sight-seeing at once, and proceeded to find a carriage. There was no lack of vehicles, the most common being a *gharry*—a kind of shut-up box on four wheels, drawn by weedy screws with the usual big bundle of fodder hung behind. At last we found an open carriage that we thought might do, and started across the Maidan, a flat park of great extent crossed by shady roads and dotted here and there with statues to famous Englishmen.

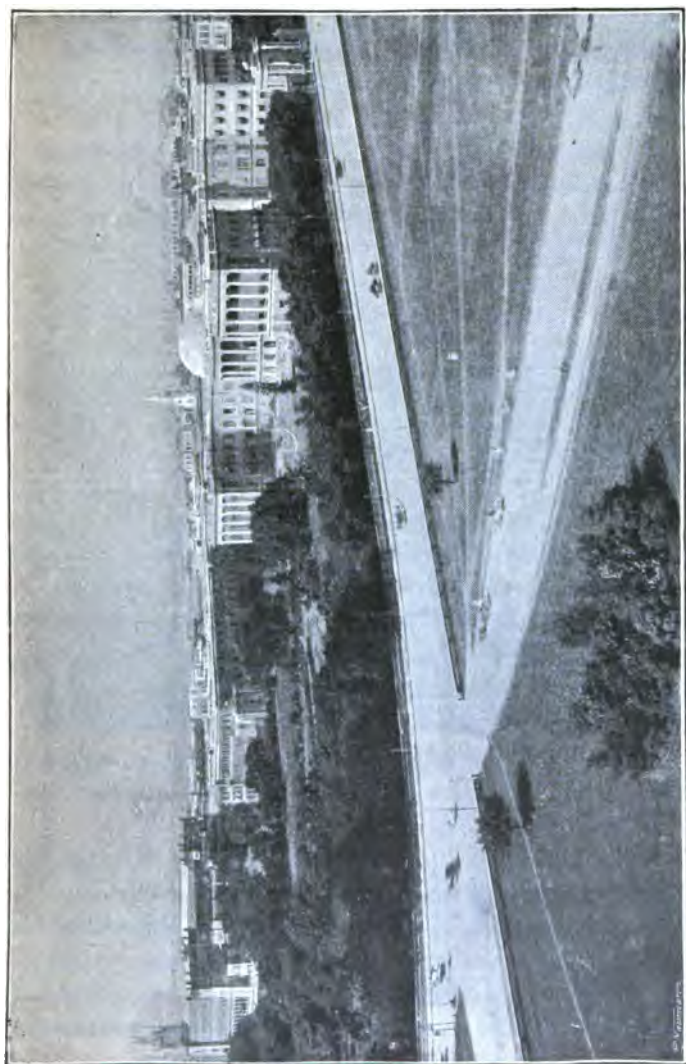
On one side of the Maidan are the lovely Eden

Gardens, facing the river, laid out with beautiful trees, shrubs, flowers, and an ornamental lake, together with a band-stand in the centre of a grassy lawn. We drove here in the evening to hear the band play and to see the people. The great electric globes spread a bright light over one of the most curious sights in the world; the native bandsmen in their picturesque costumes, the hundreds of people—Europeans, Eurasians, Hindus and other natives of many races—promenading round and round, the long lines of carriages with native drivers and footmen in gorgeous dresses and brilliant turbans, all making up a scene not easily forgotten.

The next morning we drove to Government House, an imposing building, surrounded by wide-extending lawns and gardens. Not far away is Dalhousie Square with its great piles of office buildings. But all this was too much like England, and we hurried through this part of the city to the native quarter, where we left our carriage and proceeded to walk through the bazaars.

What a wonderful sight it was, every craft and trade carried on in public! Here were the jewellers' shops, most of them not much larger than a big packing-case open on one side. In one of them was a group of natives watching the weighing out of solid bars of silver and lumps of gold: a huge iron safe nearly filled one side of the room, and the proprietor, an immense Babu in scanty clothing, sat presiding over the operation.

But the most extraordinary sight of all was the 'soft goods' or cloth bazaar, where the traders carry on their business in one great building divided up into hundreds of small shops. Steep stairs and passages connect the



CALCUTTA FROM THE MAIDAN, SHOWING GOVERNMENT HOUSE

various parts, the latter so low that we could only just walk upright in them, and so narrow that merchants on opposite sides of the way could shake hands without moving from their favourite seats on the floor.

In our school days we had been told that cotton goods were exported to India to the value of millions of pounds every year, and now many years after we began to see what it meant. Every shop was filled with the products of the Manchester warehouses—bales of all kinds, patterns, and sizes—and it was curious to see calicoes and prints, associated in our minds with handsome drapers' shops and well-dressed assistants, taken out of cases by half-naked coolies and bought and sold by natives in gaudy turbans and flowing robes.

The cloth bazaar is a marvellous hive of busy life; of crowds of chattering, bargaining natives; so thickly packed that it was extremely difficult to move about at all. We were constantly risking our limbs in climbing up steep and narrow staircases, up and down which a constant stream of natives pushed their way, their bare feet and prehensile toes securing a sure foothold where an Englishman groped his way with hesitating steps. We were very glad to get away from the noise, the heat, and the smells, and to continue our drive through the principal parts of the city.

What strange contrasts such a city presents! On the river were some of the finest sailing and steam ships in the world, moored side by side with the quaint native boats, built on the same lines and sailed in the same manner as they have been for centuries. In the street were the hideous steam tram, and the luxurious landau

drawn by high-stepping horses—such a turn-out as may be seen in Hyde Park—in company with the native cart built of bamboo poles and drawn by a pair of patient little bullocks. On one side of the city we strolled through the pretty English cemetery with its beautiful flowers



BURNING GHAT (ON THE RIGHT-HAND SIDE OF THE PICTURE),
RIVER HOOGHLI, CALCUTTA

and marble headstones, and also through the neglected old burying ground with its wonderful monuments to the forgotten worthies who built up this mighty English empire ; and not far away by the river side we saw the burning *ghât*, where the native burns his dead and casts the ashes into the sacred river.

J. W. A.

kerosene : petroleum oil.

Howrah Bridge : the bridge crossing the river Hooghli and joining Calcutta to the great railway station on the other side of the river.

prehensile : that can grip.

Babu : a native clerk who writes English, or sometimes applied to a Hindu gentleman.

landau : a four-wheeled vehicle the top of which can be let down.

LESSON 28

INDIAN CITIES. II.—JAIPUR

Jaipur is the chief town of the Rajputana States, and is essentially an Eastern city, 'a pink city set on the side of a blue lake, and surrounded by the low red spurs of the Aravalis, a city to see and puzzle over.' No English live within its walls and very few in the immediate neighbourhood. It is just a native city, its life going on in much the same way as it has done for centuries. To the traveller the most striking feature is the general activity of its people and the freedom and security with which the stranger may walk about its streets.

The town is built on an exceedingly simple plan. One long main street about fifty yards wide—the roadway well made and with broad sidewalks—runs right across the city for over a mile. Many other streets cross it at right angles, and at each point of intersection there is a market place full of buyers and sellers, while thousands of pigeons circle in great flights overhead or may be seen in flocks busily feeding on the ground.

The buildings are regular in height and style of architecture, mostly painted a kind of rose pink and

elaborately covered with Eastern designs in white. Here and there, however, the uniform line of buildings is broken by a brilliantly coloured mosque, or a temple, or a house elaborately carved and enriched from doorstep to roof with richly coloured designs. The lowest floors of all these houses are shops open to the street, and in them every kind of occupation is to be seen. We were much interested in watching the women grinding corn with a



INDIAN WOMEN GRINDING CORN

pair of stones. The upper stone has a wooden peg which acts as a handle, and this is seized alternately by the women, who sit facing each other and keep the stone rapidly revolving. The grain is heaped up on the sidewalk, which is used all over the city by traders for displaying their wares.

One of the great differences between an English and an Indian town is that in the latter the people carry

on their occupations in full view of the street. In this way we watched the metal workers hammering all kinds of vessels into shape or tracing upon them many beautiful designs. Such industries are kept in certain families, and the methods of working as well as the shapes and designs are handed on from one generation to another.

The streets were crowded with gaily-clad people, while the shopkeepers sat composedly on the floors of their shops smoking their long pipes and patiently waiting for buyers.

Amid this animated scene comes a long camel train slowly stalking in from the country ; each animal laden with wood, or stone, or sacks of grain, the head of one tied by a rope to the tail of that in front. We watch the procession pass with its curious swinging up-and-down motion, the patient, shy beasts looking from side to side as if they wondered what all the din about them could possibly mean. A baby camel is a most curious-looking creature : four ungainly legs attached to a hump, all four so close together as nearly to touch each other, and at the end of a long neck, a head that seems to be loose as it rolls from side to side or jerks up and down.

In the centre of the town and covering about a fourth of its area is the palace of the Maharajah, containing a beautiful Hall of the Durbars, with walls of different coloured marbles and inlaid panels.

We visited the museum, with its wonderful treasures, the great observatory in stone and marble, saw the caged tigers in the streets and the alligators in the river, and then mounting an elephant kindly supplied by the Maharajah started for Amber.

1



2



1. HOWL MAHAL AND STREET, JAIPUR
2. ONE OF THE MAIN STREETS IN JAIPUR

There was once a ruler of Jaipur who fought many battles and ruled for many years. He lived in Amber, a beautiful city among the hills, but, like many other Eastern rulers, he made up his mind to build a new capital for himself, and so founded the present city of Jaipur six miles away on the plain. He and all his people deserted Amber, and there it has stood silent and slowly crumbling to ruins ever since.

We left Jaipur by one of the huge gateways and for about five miles crossed a level country. Then, after traversing for about a mile a raised road sloping steeply upwards, we entered the old city. It lies in a deep valley and is enclosed by a strong wall that runs along the crest of the ridges of parallel hills and crosses the valley at right angles. Picture to yourself a deep crater within the walls the sides of which are covered with a thick sombre jungle. From the centre rises a green mound, forming a pedestal for a fairy-like and dazzling marble palace, beside which the wonders of Seville and Granada would appear insignificant. Around the mound lies the silent and deserted town whose smallest houses are like palaces, while near it is a black and gloomy lake.

We should have liked to spend days in exploring this forsaken city, but our time was short, and leaving the elephant to retrace his steps without us, we blessed the foresight that had arranged for our carriage to meet us, and were soon bowling along the level road back to our hotel.

J. W. A.

Seville and Granada: Spanish cities built by the Moors, and famous for the beauty of some of their buildings.

The Maharajah: the native ruler.
Hall of the Durbars: where the Maharajah sits in state and gives audiences.

LESSON 29

INDIAN CITIES. III.—BOMBAY

As is usual in Eastern seaports our captain had arranged that we should arrive soon after daybreak, and by seven o'clock we were rapidly steaming up the magnificent harbour to our anchorage.

For many of us this was our first sight of India, and we eagerly scanned the distant city now glowing in the warm sunlight and the shipping lying near us. Here were P. & O. and other great liners; ironclads and torpedo boats all painted white; a huge transport with the blue Peter flying, her decks crowded with soldiers tired of the burning sun and eagerly looking forward to the grey skies and bracing air and all that is understood by the word 'home' in England.

We were more interested in the native boats with their great lateen sails, and hailing one we declined to wait for the tender, and were soon ashore at the Apollo Bunder, the landing-place of Bombay, the gateway of India.

Looking across the bay the hills of the Ghats were suffused with a warm red glow; higher up the harbour we could see the island of Elephanta, where in after days we had many a pleasant picnic exploring the famous caves.

To the north of the city is the far-famed Malabar Hill, dotted with handsome houses surrounded by beautiful grounds. From the summit of the hill, which is laid



The High Court

The Clock Tower

The University

PUBLIC BUILDINGS, BOMBAY

The Secretariat

out in gardens filled with flowers and banks of ferns, a wonderful view is obtained of the great city spread out below. A wide area covered with palms fills the foreground, and across these trees to the left lies the native town, a dense mass of houses mostly white, with here and there minarets and domes of mosque or temple showing above the roofs. From this distance the town seems to be a scene of peace and quiet, a striking contrast to the incessant noise and movement of the crowded streets.

To the right the bay stretches in a bold curve to Kolaba Point, where the lighthouse shows the way into the harbour, and along the sea front are most of the public buildings, the University, the Secretariat, the Post Office, and the tall clock-tower standing as sentinel over all.

Bombay consists of two distinct towns—the English and the native. The former is called the Fort, though it is many years since the English lived in the fort for safety. It is here that the chief merchants and bankers have their offices. The roads are wide, shaded with trees and are kept well watered: the sidewalks are well paved and the shop fronts look as if they had been transplanted from a West End street. Here are pretty gardens and huge hotels, filled in the cold weather by the crowds that are constantly entering or leaving India by its great sea-gate.

Between the Fort and the native town there are wide recreation grounds where every morning and evening may be seen white-clad natives, as busy at cricket as boys in a London park on a fine Saturday evening in June.

Crossing these open spaces by a broad and shady road we enter all at once the native town with its tall houses, mostly white, many with green shutters, reminding us of a Portuguese city. Its narrow streets with no sidewalks are crowded with natives of many races—fierce-looking Sikhs and Punjabis from the north; stately Bengalis from the east; Mahrattis, Arabs, Persians,



TERMINUS OF THE GREAT INDIAN PENINSULA RAILWAY, BOMBAY

Hindus, Parsis, all in their distinctive garb—a quickly moving panorama of varied dress and colour. Every house seems to teem with life, and the ground floor is always a workshop or a shop for the sale of goods. These rooms are small, about twelve feet square or thereabouts, and here all kinds of wares are displayed and all kinds of industries carried on open to the public gaze. Here may be seen the tailor, the shoemaker, the saddler, the

tinsmith, the working jeweller, the barber, the letter-writer, all busy at work.

Here is a shop filled with lovely silks and treasures gathered from all over the East, the next is full of vegetables and fruits, while adjoining are others full of English lamps, sweetmeats, skull caps of gorgeous colours, and many other wares. What a wonderful mixture !

A little farther along we came to a part of the street given over entirely to the brassworkers. Here were



A ZENANA (OR LADIES') CARRIAGE

piles of the great brass water jars, or lotahs, in which the women carry water from the wells : the charcoal fires were glowing as the workmen pulled away at the bellows while a din of hundreds of hammers sounded above all.

And then the vehicles ! There goes a handsome carriage drawn by a pair of horses carrying a rich Parsi, clad with the exception of his tall cap, in European dress, and with the almost universal gold-rimmed spec-

tacles on his nose. Here is a native coach of antique build drawn by a pair of fawn-coloured bullocks, white-robed Hindus inside with red turbans and the never-failing caste-mark of red, yellow, or white on their foreheads. Suddenly our gharriwallah (driver) pulls up to allow a procession to pass us, its crowd of gaily dressed natives preceded by bands of musicians who fill the air with discordant sounds. Words fail to describe the variety, the picturesqueness, the colouring, the constantly shifting panorama of the native quarter! The people are industrious, their wants are few and simple, and they live in comfort if they can earn regularly a few pence a day; a man with a daily income of a rupee (1s. 4d.) holds a position among his fellows. J. W. A.

blue Peter : the flag that is hoisted when a ship is about to start on a voyage.

lateen sails : triangular sails.
transport : a ship that carries soldiers.

LESSON 30

INDIAN CITIES. IV.—DELHI, AGRA, HAIDARABAD

What memories of bygone events the sight of Delhi brings to mind! As we drive about the streets so orderly and full of busy life it is difficult to conceive of the fierce scenes that have been enacted in them, and at the great gates through which we entered.

The city lies close to the river Jumna and is enclosed by a high wall many miles in extent. We made our way direct to the palace now known as 'the Fort,' an immense

1



2



1. AKBAR'S TOMB, NEAR DELHI

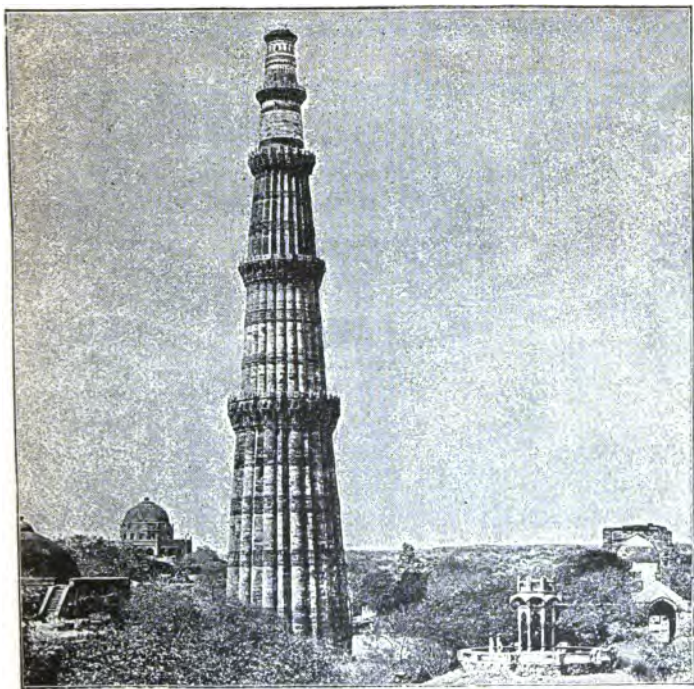
2. GATEWAY TO AKBAR'S TOMB

pile surrounded by a wall more than a mile long, pierced with massive gateways. Entering by the Lahore Gate we came to the Hall of Public Audience, a magnificent room open on three sides, with a beautiful roof supported by great sandstone pillars. The most striking feature was the emperor's throne, a piece of lovely work, covered with a canopy held up by four pillars of white marble inlaid with beautiful mosaic.

Near by is the Hall of Private Audience, a splendid marble pavilion, the ceiling of which was once covered with filigree work of gold and silver. Among the beautiful objects that once stood there was the famous peacock throne, valued when in its beauty at 6,000,000*l*. Over the arches at the entrance is written the words : 'If there is a Paradise it is this, it is this.' Adjoining it there are still standing parts of the emperor's private apartments, and the beautiful bath of pure white marble may yet be seen. The decorations on the walls of these rooms are mostly floral of exquisite design. Most of the flowers are made of coloured marbles and other stones let into the pure white marble of the walls, and so perfectly finished as to look like paintings. One of the most conspicuous buildings in the city is the Jama-Masjid, or great mosque, said to be the finest mosque in India. It was built by the Emperor Shah Jehan, and the whole of the interior is paved and lined with white marble.

Looking out from the top of the Fort the eye wanders across miles of level plain, over which are strewn the ruins of former cities. Eleven miles away is the Kutab Minar, the most wonderful tower in the world.

Springing straight from the ground and with a slight lean it rears its head to the height of about two hundred and forty feet. Who built it? No one knows, though it



THE KUTAB MINAR

is said it was the first minaret of what was to have been the greatest mosque in the world.

To the Englishman Delhi is sacred ground as he thinks of Nicholson and the other heroes of the Mutiny.

Agra, one of the most magnificent cities of the East,

stands on the river Jumna and was built by the Emperor Akbar. The central feature is the Fort, a magnificent structure containing the palace buildings and that triumph of Indian architecture, the Pearl Mosque. But the gem that the traveller wants to see above all others is the Taj

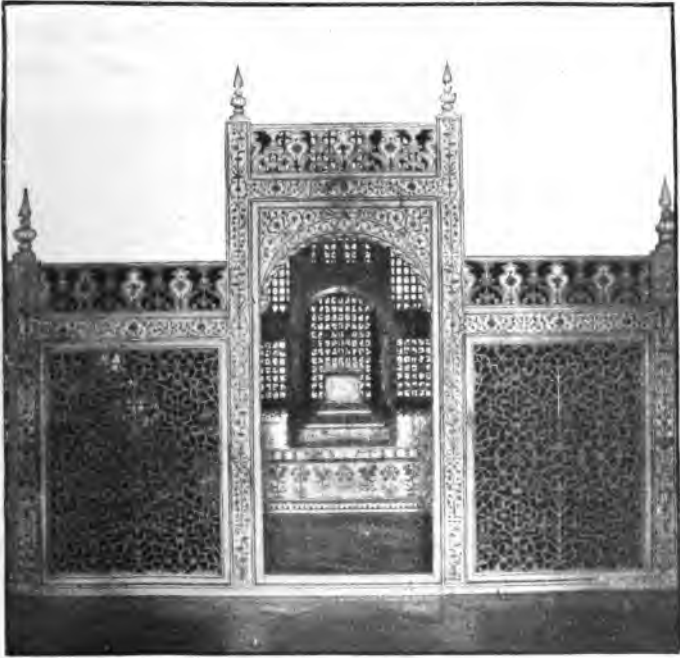


THE GEM MOSQUE, AGRA

Mahal, built by Shah Jehan, son of Akbar, as a memorial to his wife. Who can describe the Taj,¹ one of the most lovely buildings on earth? The mausoleum stands on a raised platform of white marble, at each corner of which is a tall and slender minaret of graceful propor-

¹ See Frontispiece.

tions and exquisite design. The main feature of the building is the central dome tapering to a pointed spire and crowned by the crescent. Beneath the dome an enclosure of marble trellis-work surrounds the tomb



THE INTERIOR OF THE TAJ

of the empress. The internal decorations consist of many kinds of precious stones, such as agate and jasper, with coloured marbles worked into scrolls and floral designs to relieve the whiteness of the marble walls.

The beauty of the building is enhanced by the

lovely gardens in which it stands, and by its commanding position on the river bank, from which may be seen the domes and minarets of the city glistening in the sunlight in the distance.

We had been eagerly looking forward to the visit to Haidarabad, for here is a native city the life of which flows on as it has done for hundreds of past years.



AGRA FORT, SHOWING GATEWAY

No European is allowed to live in the city, and our hotel was several miles away. For the last mile we drove along a fine causeway built on arches and forming one side of an immense tank used for storing up the water that irrigates many miles of country. The word tank does not convey an idea of what this fine stretch of water is like. It is really a beautiful lake of many miles in extent, with rocky shores, its blue waters sparkling in the sunshine.

Then we crossed a long bridge over the river, and passing through a magnificent gateway we entered the town. After spending a day there we carried away impressions of a great city encircled by high walls and pierced by massive gateways; of temples and mosques of dazzling whiteness; of a magnificent palace set in the midst of lovely gardens with ornamental



A BRIDGE AT THE ENTRANCE TO HAIDARABAD

lakes and fountains. We thought of the rose market with its immense piles of flowers and the delicious perfume that filled the air; of the wild fierce-looking men, with black hair and huge moustaches, every man armed to the teeth; of stalwart soldiers with old-fashioned flint-lock muskets with long hooped barrels over their shoulders, scimitars under their arms, and

quite an array of daggers and pistols in their belts ; of elephants with gaudy howdahs on their backs ; of lines of camels drawn up at the drinking places ; of gaily-painted palanquins, borne by swarthy bearers who kept up a curious chanting as they trotted by ; of women passing steadily along through the crowds with large



CHAR MINAR, HAIDARABAD

water jars balanced on their heads ; of the patient *bhisti* spraying water with his hands over the sandy roads.

One sight we shall always remember, for as we were bargaining for something that took our fancy in the bazaar, the Nizam passed by. First a troop of cavalry galloped past, and behind them his Highness in a

carriage drawn by four splendid and gaily-caparisoned horses ; other carriages followed with his suite, and bringing up the rear was another troop of horse soldiers galloping wildly with a great clatter of weapons, their drawn swords flashing in the sun.

J. W. A.

filigree : ornamental wire work frequently arranged in intricate arabesque patterns.

Nicholson : General John Nicholson was shot when leading one of the storming parties, 1857.

Emperor Akbar : reigned from 1556-1605.

Shah Jehan : reigned from 1605-1627.

mausoleum : a building that encloses a tomb.

the crescent : shaped like the new moon : the sign of Muhammedanism.

scimitars : curved swords.

palanquin : an enclosed carriage carried by means of poles at each end.

LESSON 31

SCENES OF NATIVE LIFE (I)

Irrigation.—India, as you know, contains nearly three hundred millions of people, of whom a vast number could not exist at all if it were not for the wonderful system of irrigation by which water is stored up in the rainy season and then allowed in the dry weather to run slowly and by millions of small channels over the land. For centuries past wise native rulers have stored up water in this way, and under British rule irrigation works have been carried out with such skill that some of them may be ranked among the greatest engineering feats of the age.

Beginning at the upper end of a valley, a series of banks or *bunds* are built across it. The bunds keep the water back, and as it is wanted it is allowed to run away

slowly through endless shallow ditches and so is taken to the fields. As the traveller passes through the country one of the most common sights is to see the patient *ryot* raising water either from the wells or from the irrigation trenches.

Here is a native perched on a cross-bar, to one arm of which is fastened a leather bucket. By carefully balancing himself he dips the bucket into the tank and fills it, and then raising it by shifting his weight along the other arm of the cross-bar, he pours the water into a wooden trough, along which it flows to the thirsty crops.

Many of the wells are of great depth, and very ingenious methods have been adopted for raising the water. Here is a description of one that we examined : An inclined plane is constructed with its upright end and sides of brick, and the long slope upwards is filled with earth and stones, forming a roadway wide enough for a pair of bullocks to pass up and down. In the middle of this roadway is a trench, down which the water can flow. The length of the plane depends largely on the depth of the well.

At the top of the plane, and suspended over its upright end, is a large wheel, over which is passed a long rope, having a bucket attached to one end, while a yoke of oxen is fastened to the other. The bucket is of leather and very bulky, and so made that it collapses if placed on the ground when full.

One man works the bucket, which he lowers swiftly down the well. As soon as it is full the bullocks start off down the incline, thus raising the bucket to the

top of the plane, when it is seized by the man in charge and lowered into the trench, where it collapses by the weight of the water inside. By working with two pairs of oxen a large quantity of water is thus raised and distributed, for the industrious ryots and their bullocks work from dawn to dark.



GROUP OF INDIAN WOMEN CARRYING WATER IN A VILLAGE

Water-carrying and Washing.— You must remember that India is a land of villages, in which the great bulk of the population live, and that, except in a few of the large cities, all the water for household purposes must be carried from the wells or streams. All the water-carrying seems to be done by the women. In the early morning and in the evening they may be seen walking

from the wells with large brass pots of water on their heads.

It is curious, too, to see the women and men washing clothes, which they carry to a stream or to the side of the tank. Each has his favourite stone, upon which the garment is alternately beaten and soaked in the water.



ONE TREE HILL, SECUNDERABAD

Note native washermen at work, and the buffaloes.

The new-comer to the country is astonished when he finds that his shirts are worn out after going to the wash only a few times, but he ceases to wonder when he sees how the washing is done. It is a pretty sight to watch the women at work with their black hair smoothly brushed and tied in a knot, their picturesque dress, the large nose and ear rings, the bangles on their

arms and ankles, their smiling faces and their endless chatter.

The Bhisti.— This is the water-carrier and road-waterer. He sews up a goatskin, leaving an opening at the neck, and carries this skin round his waist, fills it with water, and may be seen at all hours of the day busy sprinkling the roads with the water he squeezes into his hand, or pouring it round the flowers. But where one likes to see him best is at the roadside railway station when a train comes in ; then every door is crowded with thirsty natives holding out their brass lotahs for the bhisti to fill.

J. W. A.

ryot: a cultivator.

LESSON 32

SCENES OF NATIVE LIFE (II)

The Madras Fisherman.—He was a constant source of interest to us. As our ship approached Madras harbour in the early morning, we slowly picked our way among these native fishermen standing upright in their rude cockle-shells of boats, holding a fishing line in each hand and swaying with every motion of the rollers that continuously beat upon this shore.

Their boats would not be deemed worthy of the name in England, for they are only three or four logs of wood tied together and so arranged as to have in outline a somewhat boatlike shape. The central log is slightly curved at one end to form a prow, and a shorter log is lashed to either side, the three logs thus forming a

slightly concave float about twelve feet long and a yard wide. Some, however, are rather larger than this.

The logs do not fit closely into each other, and so the sea flows between and over them. Each boat has a crew of two or three, one of whom is usually a boy. The sails are generally tanned, though some are white, and the paddles are made of a flat piece of board about a foot square fastened to a stout pole about a yard in length.

It is a very pretty sight to watch the boats coming ashore in the evening. A heavy surf always beats upon the beach, and it would be impossible to land by an ordinary English boat.

Here comes one, her sail full of wind, the boat low in the water and all awash, so that she can be seen only when she rises to the top of a wave. She flies through the water with a strong breeze behind, and the crew are standing up, each with a paddle in his hand, ready to keep her on her course with swift strokes should a larger wave than usual cause her to fall into the trough of the sea. Each fisherman wears a curious three-cornered hat made of broad rushes or of cocoanut leaves, and in shape just like a dunce's cap.

As the boat approaches the breakers, the men suddenly turn her broadside to the seas and quickly furl the sail. Then they paddle quickly for the shore. Carefully and steadily they come along until the first line of breakers is reached and the curling wave breaks right over them. For an instant it seems as if they must be overturned, but a few sharp strokes bring the boat straight for the beach again. Now they are in the backwash, and hard and quick go the paddles to prevent them

being carried out again. Here comes another curler, which washes them further up, and presently the boat touches the ground. Instantly the crew jump out, run her up as far as they can, and then turn her broadside so that she holds against the sand.

Here they are met by their wives and children. The boys drag the boat higher up and unlash the basket that holds the fish. Surrounded by a chattering crowd, the fishermen sort out the catch, giving a few small ones to the beggars who always wait for the boats coming home, and a few more to the crows that are flying overhead on the look-out for their share, and then, carrying fish, sails, and paddles, the party move homewards, to the hot supper of rice and fish that awaits them.

Paddy Fields.—After travelling through a region of rocky forbidding hills and patches of burnt-up plains, we suddenly came upon a wide stretch of paddy fields. How refreshing to the eye was the broad stretch of the delicate green of the young rice plants! To grow rice well requires much care and labour, as well as an abundance of water. The paddy fields are laid out in squares and rectangles, with troughs or raised ditches full of water forming their sides. The ground is prepared by first covering it with water, then oxen are driven all over it to stir up the mud and loosen the surface, leaving it in a semi-liquid condition and ready for the young plants. These are raised in a seed-bed which is prepared with even greater care. When the patch is dry, the ryot digs it over carefully, then strews a layer of dry cow-dung, and above that another layer of straw and grass. This is set alight, and

burning slowly but with great heat renders the ground very fine and friable. The soil is then well soaked and the rice seeds sown very thickly. The young shoots soon spring up, and when a few inches high they are taken out and planted in rows in the sodden paddy fields.

Think of the labour and care involved in setting out millions and millions of such tender plants. While the rice is growing the ground is kept covered with water, and the ryots may be seen up to their knees, constantly moving up and down the rows, picking out the weeds.

As the seed ripens, the water is drained off, and the crop is cut with short sickles or hooks. When threshing begins, the rice is laid down in heaps upon the ground, and the grain is trodden out by a team of four or five oxen slowly walking abreast round and round a central post, to which the nearest ox is tied. It reminded one of the old Jewish injunction 'Thou shalt not muzzle the ox that treadeth out the corn.'

Domestic Animals.—India is the paradise of cows, which are held to be sacred animals. And what beautiful creatures some of them are, and how they vary in size from the huge stately beast that, gaily caparisoned, draws the brightly painted carriage of state, to the mouse-coloured little ox that trots along with the small ekka behind it. The buffalo serves much the same purpose here that the cow does in the West. It is buffalo milk that you have in your tea or your puddings, and buffalo hump that gives you the most toothsome joint of beef.

What a quaint object the animal is as you see him

wallowing in the soft mud at the edge of the tank, or wading further in to get away from the flies and the sun, he stands over his hump in water, his ugly head and wicked-looking horns only to be seen !

It is curious, too, to see the shepherd bringing home his flocks of sheep and goats. He walks in front and the animals slowly follow him. They are so much alike, too, that it is difficult to tell the sheep from the goats.

The West can learn a valuable lesson from the East, where all animal life is treated with kindness, where the pretty grey squirrel is so tame that it comes into your drawing-room and runs along the curtain pole, and where all animals are treated as being equally with man under the care of the great Creator. J. W. A.

LESSON 33

SCENES IN CEYLON (I)

As day broke, the mountains came slowly into view, and, as the sun leaped up, the lovely green shores of Ceylon were unfolded to our longing eyes—glad to gaze upon the soft green tints after so many weeks at sea.

We were steaming slowly towards Point de Galle, and, after signals and frantic hootings from the ship's siren a boat was seen coming off to us. The lighthouse and town glistened white in the sunshine, and presently our engines were stopped and the ship lay motionless upon a summer sea. Our luggage was soon transferred to the native boat, and in about an hour's time we were ashore.

The buildings at Point de Galle show clear traces of both Dutch and Portuguese occupation. At one time it was the calling place for ships going to Madras, Calcutta, and the Far East. But since the great harbour has been constructed at Colombo its shipping trade has gone, and it has sunk into the sleepiness of a deserted town, with warehouses and buildings that show what it once has been.

But we were in a hurry to reach Colombo, and the railway station was thirty-six miles away at Bentota ;¹ so we took places in the mail cart and started off early the next morning. What a lovely drive it was ! The road was often quite close to the sea, and rarely, if ever, a hundred yards away. Skirting the shore is the coral reef, which the sea is for ever breaking upon ; outside, the water is of the loveliest blue ; where the waves fly over the rocks it is like showers of silver ; and inside the reef of the most beautiful green, so clear that the dazzling whiteness of the coral sand shows through.

Tall cocoanut trees form a broad belt all along the shore, and the road is lined with native huts. The villages were only a short distance apart, and we were delighted to peer into the native shops, which as usual were all open to the road, the wares being displayed on wooden trays.

What numbers of people we saw ! most of them obtaining their living from the cocoanut trees. A man's wealth is reckoned by the number of trees he owns. They are planted thickly together, the waving crowns giving an almost continuous shade, through which the

¹ The railway is now completed between Colombo and Point de Galle.

sunlight glinted upon the bright green grass beneath—for, unlike most trees, the cocoanut allows the grass to grow within a foot or two of its trunk.

The nuts hang in clusters near the top of the tree, and above them the huge fanlike branches wave in the breeze. The tree bears when four or five years old, and the fruit is picked three or four times a year. When first picked the nut is of a yellowish-green colour and smooth outside.

Many are the uses to which the tree and its fruit are put. When first picked the nut is encased in a thick shell of tough fibre, which is of even more value than the nut itself. The cocoanut as seen in England has been stripped of this outer coat.

The natives fix a sharp iron spike into a block of wood which is placed upon the ground. The nut is struck sharply upon this spike, thus splitting the outer shell into halves, and the covering is torn away.

The nut and its outer shell undergo quite different treatment, and we will first follow the fortunes of the latter. It has first to be thoroughly soaked in water, and for this purpose small enclosures are made in the rivers or the lagoons by driving stakes closely together into the bottom and thus enclosing small rectangular patches of shallow water. Sometimes these enclosed spaces adjoin each other; they are never very large, as it is necessary to put each picking into a separate pool.

Each pool is filled with the halves of the outer shell, which float upon the surface and are left until they are soaked through and through, and the soft vegetable matter lying between the tough stringy fibres is quite

decayed. The odour arising from one of these pools when the water was stirred was dreadful to a European



A MAN DRAWING TODDY

nose, and we wondered whether the Sinhalese objected to it as we did.

The decayed halves are next loaded into small carts, covered with coarse matting, and drawn by one or two

small humped oxen to the native huts, near which they are spread out to dry. They are next beaten with heavy sticks, and children of all ages were to be seen busily engaged at this work.

When well beaten the fibres are picked out and thrown into a heap, forming a light brown mass that is springy to the touch, though each fibre is strong and rough. The fibres are then plaited into a long coir rope, which is rolled into a large bundle and sent to the nearest seaport to be shipped to England, where it is made into stout ropes for ships' cables, into matting, and also used in many other ways.

After being stripped of the outer casing the nut is split into halves and laid out to dry. It is next cut up into smaller pieces and dried still farther until what was at first a white milky substance has become a dark brown one. These pieces are then put into a large mortar and pounded and squeezed until all the oil has been extracted.

The nut, when fresh, is used in many ways for food, and the water which it contains is a most refreshing drink on a hot day—and when is it not hot in Ceylon? When we stopped at the village post offices to pick up the mail bags the natives crowded round, offering green nuts for sale. When we had chosen our nuts, the seller at once cut a hole at one end, from which we sucked a cool delicious draught.

J. W. A.

LESSON 34

SCENES IN CEYLON (II)

As we drove along we were more and more struck with the density of the population, and were never tired of watching the people. It was all new and strange, but so full of interest. There were people everywhere; the road full of smiling, chattering groups; people busy outside every hut; others at work among the trees; native schools crowded with pretty children; men fishing in their boats near to the shore; others hauling in their nets or sorting their fish; and parties of all ages and sizes bathing inside the reef.

The men are quite as tall as the average Englishman, while some are very tall. When young they are lithe, well-built, and active, but often become fat as they grow old. Their skins are dark brown in colour, their features are regular, their faces intelligent, and their eyes dark and expressive.

The girls are pretty, with bright, happy faces; but the women become wrinkled and are apt to lose their good looks when still young.

When at work the men wear a garment fastened round the waist, wrapped in loose folds and falling nearly to the feet, which are bare. The women wear, in addition, a loose cotton jacket. The young children play about with very little clothing to cover their brown skins, but are dressed all in white to go to school.

But what a contrast when they are dressed to go to

the town or to visit their friends! Then the men wear a similar loose garment made of some rich material, an undervest of a bright colour, a jacket of silk worked with embroidery, and a hat of woven silk either black or a mixture of red and yellow. The hair is tied back tightly into a knot, and every one wears a tortoise-shell



FISHING BOATS, CEYLON

comb. The women are dressed in bright-coloured clothes and all wear jewellery.

We went to look at the native boats, some of which were drawn up on the sands. A section of a cocoanut tree is hollowed out and the ends pointed. Upon this two low sides are built, and there is only just width between the sides for one man to sit. Cross-pieces or thwarts of bamboo serve as seats, and an

outrigger held in place by two bent arms lies parallel to the side of the boat and a few feet from it. This outrigger prevents the boat from being upset in windy weather or in a rough sea. It also enables a large sail to be used, and when the wind is very strong it is not an unusual sight to see a man sitting on the outrigger.



COLOMBO

Swarms of fish of all shapes and colours are found near the shore, and are caught in seine nets or by angling from the rocks with long bamboo poles.

We were sorry to reach the station and exchange the charm of the road for the railway carriage, which in a few hours took us to Colombo.

Next morning we woke at daybreak, and presently a

Sinhalese waiter brought in the tea and toast and opened the shutters. Outside was a perfect babel of cawing from the crows looking out for their morning meal. They were so tame that they perched on the railing of the verandah, and, with heads quaintly stuck on one side, begged for toast or fruit.



NATIVE BRIDGE OF BOATS, NEAR COLOMBO

We took our bath in Sinhalese fashion—that is, by filling a big jug and pouring the water over our heads. Then, dressing quickly, we each took a rickshaw and started to see the town.

Looking over the harbour, we could see the huge breakwaters that protect the anchorage from the wild weather of the monsoon. What a variety of shipping! Steamers flying the house-flag of great steam-ship lines

famous all round the world: fleets of native boats carrying passengers to and fro: large native dhows covered in by an awning, with carved bows and high sterns, and a long lateen spar lying across their single mast.

Leaving the quay, our rickshaw boys soon trotted across the bridge of boats and took us into the heart of the fruit market. It was here in the native town that we got an idea of what Colombo really is. Here were narrow streets crowded with people, so that it was only by constant shouting that our boys forced a passage.

The streets were lined with shops, all with their fronts quite open, displaying an infinite variety of wares; native carts of all shapes and sizes, drawn by oxen, blocked the way. And the variety of odours: pleasant perhaps to the native nose, but, to say the least, strange to the European; and we were glad to get out of the noisy crowded bazaars and breathe the perfumed air of the lovely cinnamon gardens.

J. W. A.

seine net: a net which hangs vertically in the water, and, when the ends are brought together or drawn ashore, encloses the fish.

rickshaw: a small carriage drawn by men.

dhow: a coasting vessel with one mast and a lateen sail.

LESSON 35

THE PRODUCTS OF CEYLON

‘Ceylon, from whatever direction it be approached, unfolds a scene of loveliness and grandeur unsurpassed, if it be rivalled, by any land in the universe. The island rises from the sea, its lofty mountains covered

by luxuriant forests, and its shores, till they meet the ripple of the waves, bright with the foliage of perpetual spring.' The Brahmans called it 'the resplendent;' the Buddhist poets wrote of it as 'a pearl upon the brow of India;' the Chinese knew it as the 'island of jewels,' the Greeks as the 'land of the hyacinth and the ruby;' and the early navigators are answerable for the fable 'that far to seaward the very breeze that blew from it was full of perfume.'

'The soil is light and does not respond to systematic cultivation; but the plentiful moisture arising from the interception of every passing vapour from the Indian Ocean and the Bay of Bengal, added to the intense warmth of the atmosphere, combine to force a vegetation so rich and luxuriant, that imagination can picture nothing more wondrous and charming. Every level spot is enamelled with verdure, forests of never-fading bloom cover mountain and valley, flowers of the brightest hue grow in profusion over the plain, and delicate climbing plants, rooted in the shelving rocks, hang in huge festoons down the edge of every precipice.'

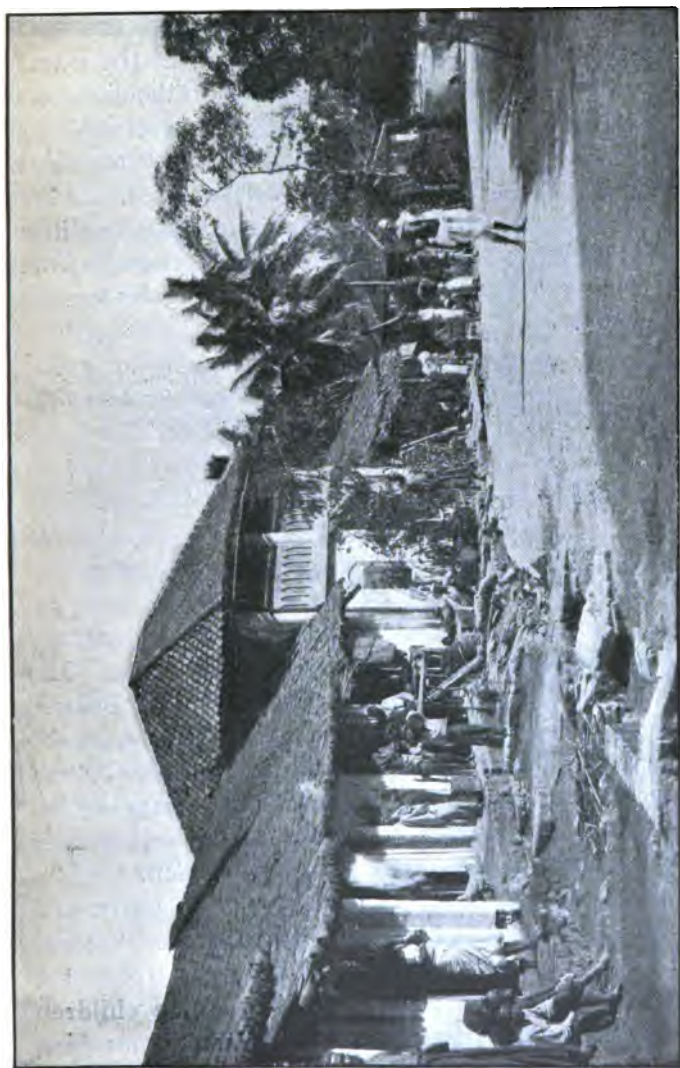
From the rain-drenched hills of the interior numerous streams rush through deep and beautiful valleys to the sea. Formerly these streams were utilised to fill numerous tanks, some of great size, from which the water was led to the terraced rice fields of the hill-sides. Invasions from the mainland, internal wars, and misgovernment led to the neglect of these irrigation works, and what was once highly cultivated land, supporting a large population, relapsed into jungle, among which the extensive ruins of great cities bear witness to

the magnificence of the ancient rulers of Ceylon. Of late the repairing of the tanks, the making of good roads, and the introduction of new industries have done much to bring back prosperity to the island.

‘The field on which rice is grown in the mountains forms one of the most picturesque and beautiful objects in the interior. Selecting an angular recess where two hills converge, the Sinhalese construct a series of terraces, raised stage above stage, and retiring as they ascend along the slope of the acclivity, up which they are carried as high as the soil extends. Each terrace is furnished with a low ledge in front, behind which the requisite depth of water is retained during the germination of the seed, and what is superfluous is permitted to trickle down to the one below it. In order to carry on this peculiar cultivation, the streams are led along the level of the hills, often a distance of many miles, with a skill and perseverance for which the natives of these mountains have attained a great renown.’

The chief wealth of the island at present is found in its tea, cocoanut, cinnamon, and cocoa plantations. The cultivation of coffee, owing to a disease attacking the plants, has been abandoned in favour of tea, which here attains great perfection.

The tea plant grows about three or four feet in height, bearing a dull green leaf, jagged at the edge. The leaves are picked by Tamil coolies from India, both men and women, who break off the newly-grown shoots when two leaves are formed and another one is coming. After the young green leaves have been picked, they are spread out to wither, and then put into a machine and



A VILLAGE SCENE IN CEYLON

rolled for three-quarters of an hour. They are next taken to a breaking and sifting machine, and the leaves which do not pass through the holes in the sifter are again rolled. After passing through this machine they are heaped together to ferment, and when fermentation has taken place they are put in a tea-drier. After drying they are carefully sorted into various qualities according to size—the finest tea, which is generally from the smaller leaves and stalks only, having by far the best flavour.

hyacinth: a red or pale yellow
gem.
acclivity: the ascent.

resplendent: very bright.
Tamil: natives of Southern India
and Northern Ceylon.

LESSON 36

INDO-CHINA: PEOPLE AND PRODUCTS

At present this great peninsula is almost entirely divided between England, France, and Siam. The western portion, consisting of Upper and Lower Burma, forms part of our Indian Empire; the eastern, from the borders of China to Cape Cambodia, is ruled by the French; the independent native State of Siam lies between, and the southern projection contains a number of small Malay States under British protection.

The people as a rule are good-humoured, lively, and contented. Children show the greatest respect to their parents, and parents are very kind to their children. Everybody smokes; men, women, and even children may be seen puffing their cheroots. When not smoking

they are generally engaged in betel-chewing. In Siam every person of rank is followed by a train of attendants carrying his tea-pot, betel-box, and spittoon.

The houses are built on posts, so as to lie above the level of the great floods, which in the rainy season cover the country for miles on either side of the rivers. Even in the high land they are constructed in the same fashion, as it is extremely unhealthy to sleep on the ground floor in so damp a country.

Rice, which flourishes both on the hills and in the plains, is the universal food, and is generally eaten with fish, meat, or vegetables. Fish abound in the rivers and lakes, and are caught and dried in enormous quantities. In some parts of the peninsula a meal is not considered complete without some fish-paste, which, though often rather high, is consumed with evident relish.

In the long narrow peninsula of Malacca, vegetation grows so profusely that man can hardly hold his own against the rapid growth of the jungle and forest. The only roads are the rivers and the narrow elephant tracks; elsewhere a path through the thick undergrowth of rattans and other creeping plants can only be secured by the help of the heavy Malay knife. Rattans, which are extensively used by the natives for ropes and bridges, are most peculiar plants, creeping along the ground sometimes for a distance of over two hundred feet, with a stem of about an inch in diameter, perfectly smooth, and with no appearance of foliage beyond a bunch of feathery leaves at the extremity.

Here and there, generally by the side of a river, are the *campongs* or villages, surrounded with rice fields and

clusters of cocoanut palms and fruit trees. The huts, built of wood, are raised on posts so that their inmates may be out of the way of floods, harmful beasts, fevers, and rheumatism. In the centre of the village is the mosque, the natives being devout followers of the Prophet, and by the river banks are numerous boats. The Malays are skilful fishermen and bold sailors ; their piratical *prahus* being at one time the terror of these seas. Wallowing in the mud may be seen numerous buffaloes, the most useful beasts of burden in the peninsula. These animals are petted and made much of by the Malays, with whom they are exceedingly gentle ; but no sooner is a white man seen than they lay back their formidable horns and show signs of great animosity.

The largest town in Indo-China is Bangkok, the capital of Siam, which is said to contain half a million inhabitants. When approached from the river, the glittering spires of its palaces and numerous temples give it a very striking appearance. The roads, however, are bad and very narrow, hence the river Menam and the many canals connected with it are the main highways. The finest buildings stand along the river banks, and on the stream itself are moored rows of boats, five or six deep, upon which live a large section of the population. Nearly every one has a boat, and those who are well-to-do keep one or more boatmen as a part of their regular establishment. Away from the river the houses are mostly mere sheds of bamboo, lining the sides of the narrow dirty lanes. As is the case in most of the towns of Indo-China, the trade is almost wholly in the hands of the industrious and persevering Chinaman.

The most important place, however, in the whole of Indo-China is Singapore. The island has a heavy rainfall, a warm even temperature which keeps at about 80° throughout the year, and is clothed with vegetation to the water's edge. Among the sights of this busy town



BOATS AT THE MOUTH OF SINGAPORE RIVER

are its fine Botanical Gardens, where may be seen tropical plants of all kinds, its excellent harbour crowded with shipping, and its streets with their motley crowd of Chinese, Malays, Sikhs from the north of India, Klings from the south, Parsi merchants from Bombay, Arabs,

Jews, and occasional Europeans, conspicuous by their pale faces among this dusky throng.

cheroots : cigars.

betel : a plant the leaf and nut of which are chewed by natives of the East.

prahus : long, narrow, swift-sailing boats.

rattans : canes ; really a species of palm with long, slender, flexible stems.

LESSON 37

INDO-CHINA, ITS ELEPHANTS, PAGODAS, AND PRIESTS

To a stranger, three of the most conspicuous objects of Indo-China would probably be its elephants, its pagodas, and its priests. This is the true elephant land, the animals being larger and more extensively used here than in any other part of Asia. In every village a number of these useful beasts are kept, and no other animal is so well fitted for traversing the primeval forests and dense jungles. One of the sights of Rangoon is to see the elephants working in the great timber yards. The teak is felled on the hills of the interior and the logs are dragged by elephants to the nearest river, down which they are floated on large rafts to the yards. Here the whole of the heavy work is done by carefully trained elephants, who convey the logs to the saw shed, thence to the stacking place, and even lift them on the stacks, using head, trunk, tusks, and even feet when necessary.

An especial object of veneration is the white elephant. Pious Buddhists believe that Buddha himself once existed in the form of an elephant, and as a white one

is regarded as the king of elephants, it is consequently looked upon with reverence throughout the land. These so-called white elephants are not really white, but light-coloured in places, with perhaps a few white hairs.



SOOLAY PAGODA, RANGOON

They are fed, housed, and waited upon with the greatest care by a staff of servants appointed solely for that purpose, and one of the proudest titles of the king of Siam is that of 'Lord of the White Elephant.'

Pagodas are tower-like masses of masonry erected to mark some sacred spot ; and as the most meritorious act a Buddhist can perform is to build a pagoda or a monastery, these erections are to be seen everywhere. The most celebrated is the great pagoda at Rangoon, which towers upwards from its circular base to a height of three hundred and twenty feet. It is built on a low flat-topped hill, and its gilded surface, glittering in the sun, is the most striking object for many miles around. The approach is by four long flights of covered-in steps, the sides of which are occupied by little stalls where offerings may be bought. These steps lead to the platform, from which the lofty structure tapers upwards to its jewelled crown, the huge metal umbrella, hung round with tinkling silver bells. At the foot of the pagoda are four richly-carved shrines, where offerings are made and religious truths repeated by the worshippers. The platform also contains numerous images of Buddha, tall masts, bronze bells, and many other objects, the gifts of the devout. On the great feast days the platform and its approaches are crowded with an immense throng of pilgrims from all parts of the Buddhist world.

The numerous monasteries are inhabited by thousands of monks or priests, who devote much time to the teaching of the young, every Burman or Siamese boy being expected to attend the monastic school. The monks have their heads shaven and wear orange-coloured robes. The rules of their order compel them to live entirely upon charity ; hence every morning a procession of monks, each carrying a brown earthenware begging-

bowl, leaves the monastery and passes along the streets. As it is regarded as a duty and a privilege to supply the needs of a holy monk, there is no lack of offerings. Should the bowls be full before the round is completed, the contents are emptied by the side of the way for the dogs and birds, thus making room so that all may have the opportunity of procuring merit by their charitable gifts.

primeval : ancient, belonging to the first ages.

LESSON 38

ASIATIC RUSSIA

The Russian dominions in Asia embrace more than one-third of the continent ; the whole of Northern and a considerable portion of Central Asia being under the rule of the Czar. This vast territory is, however, very thinly peopled ; Siberia, by far the largest portion, with an area of nearly five million square miles, has only a population of about six millions.

The slight elevation of the Ural Mountains, the level nature of the country, and the scanty population, made extension in this direction comparatively easy, and within eighty years of the first invasion by the Cossack chief, Yermak, the Russians had reached the shores of the Pacific. Thousands of hunters, in search of fur-bearing animals, followed the invaders, explored the country, and made the first trading stations. Fortified posts were built, settlements of Cossacks were

established, and the resistance of the native tribes gradually broken down.

From the very earliest years the Russians used Siberia as a place of banishment for prisoners, and it is probable that during the last two hundred and fifty years at least a million exiles have been sent to these desolate regions. For many years hunters and convicts were the chief settlers, but of late a continuous and increasing stream of emigrants from European Russia have flocked to the rich corn-lands and steppes of Western Siberia, where they now form about seven-eighths of the whole population.

During the last fifty years the Russians have greatly extended their territories. South of the Kirghiz steppes they have absorbed Turkistan and advanced their outposts nearly to the frontiers of India, while in the east of Asia they have crept southwards to Vladivostok on the Sea of Japan, and still more recently, in 1898, they acquired from China the important naval station of Port Arthur in the Yellow Sea ; thus providing, by means of the Manchurian and Siberian railways, a gateway for Russian trade, open to vessels all the year through.

This huge territory may be conveniently divided into three regions, each presenting characteristic features of its own : (1) Siberia, comprising the country drained by the four great rivers, Ob, Yenisei, Lena, and Amur. (2) Russian Central Asia, a district chiefly draining inland by the Oxus and Sir to the Aral Sea, and which includes Turkistan and the Kirghiz steppes. (3) Caucasia, the neck of mountainous country lying between the Caspian and the Black Sea.

LESSON 39

SIBERIA: PEOPLE, INDUSTRIES, AND
DWELLINGS

This vast country, which extends from the Urals to the Pacific and from the Arctic Ocean to the borders of the Chinese Empire, necessarily exhibits a great variety of aspects. There are fertile black earth plains in Western Siberia capable of supporting millions of people; wide-spreading steppes in both Western and Eastern Siberia, covered with flowers and verdure, upon which enormous numbers of sheep, cattle, and horses are reared; rich meadow lands and extensive forests of valuable timber in the Amur district; uplands along the upper courses of the Yenisei and Lena covered with forests and rich in gold and furs; the still loftier regions of the Altai with their beautiful valleys, lakes, and glaciers; the dense forests covering the swampy lowlands of the Ob; and the dreary tundra of the far north.

The scanty population consists mainly of Russian colonists, who have settled on the rich corn-lands and steppes of Western Siberia, and in the neighbourhood of the great railway. Of the native races, who appear in many cases to be gradually dying out, the most numerous are the Buriats, a dull, sluggish race, much addicted to excessive drinking and smoking. They inhabit the country around Lake Baikal, and are now mostly settled and engaged in agriculture and stock-rearing. The Tunguses, who live in the vast forests further north,

are a cheerful, trustworthy, hardy race of hunters; courteous and hospitable to strangers; bearing privations and dangers with the utmost endurance. The only native people showing an increase in numbers are the hardy Yakuts of the Lena basin, whose keenness in bargaining is perhaps only surpassed by the Chinese.

Nearer the coasts of the Arctic and Pacific Oceans are many smaller tribes, who live almost entirely by fishing and hunting. So largely do fish enter into the existence of these people, that the Goldi, a tribe living on the Amur, even clothe themselves in dresses made from salmon skins.

Of these smaller tribes the most interesting are the Koriaks, who live to the east of the Yakuts. They are an exceedingly amiable race, treating their women and children with the utmost kindness. The nomadic Koriaks keep enormous numbers of reindeer, and necessarily remove their habitations frequently, as the reindeer herds, sometimes consisting of thousands of animals, paw up the snow, and in a few days consume all the moss round about the encampment.

The winter *yourts* of the more settled Koriaks are among the most extraordinary of human habitations. 'They are built somewhat like a huge wooden hour-glass, twenty feet high, in the shape of the letter X, and are entered by climbing a pole on the outside, and then sliding down another through the waist of the hour-glass, which waist serves for door, window, and chimney. Holes are cut in the logs for climbing, but they are too small for the heavily-clad fur boots of a novice, who has, therefore, amid sparks and smoke, to hug the pole, slide



THE REINDEER. TUNGUSES, WITH BIRCH BARK TENT

(From Lansdell's 'Through Siberia')

down, and as best he can avoid the fire at the bottom. The interior presents a strange appearance, lighted only from above. The beams, rafters, and logs are smoked to a glossy blackness. A wooden platform, raised about a foot from the earth, extends out from the walls on three sides to a width of six feet, leaving an open spot eight or ten feet in diameter in the centre for the fire, and a huge copper kettle of melting snow, in which is usually simmering fish, reindeer meat, dried salmon, or seal's blubber with rancid oil; these make up the Koriak's bill of fare. When any one enters the yourt the inmates are apprised of the fact by the total eclipse of the chimney hole.'

The chief occupations of both the Russian colonists and the natives are agriculture and cattle rearing, though at present but little corn is exported. A few years ago provisions were fabulously cheap; at Tomsk a sheep could be bought for two shillings; in the remoter villages of the Yenisei a calf could be had for sixpence, and live ducks for a penny each; while on the Lower Amur a salmon weighing from fifteen to twenty-five pounds could also be purchased for a penny. Now, however, the Trans-Siberian railway will enable these products to be sold in the markets of Europe; already butter, poultry, and farm produce are brought by rail to Baltic ports and conveyed thence by swift steamers to Hull.

In this connection should be mentioned the recent voyages of Captain Wiggins, who has made a number of trading voyages from England, northwards by the Kara Sea, which is only open for a short time in

summer, to the Yenisei. Some of the rails for the Trans-Siberian line were sent by this route, and landed at Krasnoyarsk seventeen hundred miles up the river, the steamer bringing back a cargo of Siberian produce.

Mining is also an important industry, the Urals and the Altai Mountains containing much mineral wealth. The extensive goldfields, which lie along the upper course of the Yenisei and Lena, also supply a considerable amount of the precious metal. At Ekaterinburg, the centre of the mining industries in the Urals, great quantities of polished stones such as porphyries, jaspers, and marbles are prepared.

Hunting is still a profitable though a declining occupation, the keenness with which the fur-bearing animals have been pursued, and the wholesale destruction of the forests in many parts, have gradually made the rarer furs very difficult to obtain.

(Partly adapted from Lansdell's 'Through Siberia,' by kind permission of Messrs. Sampson Low & Co.)

yourts : habitations.

jasper : a kind of quartz, usually of a red or yellow colour.

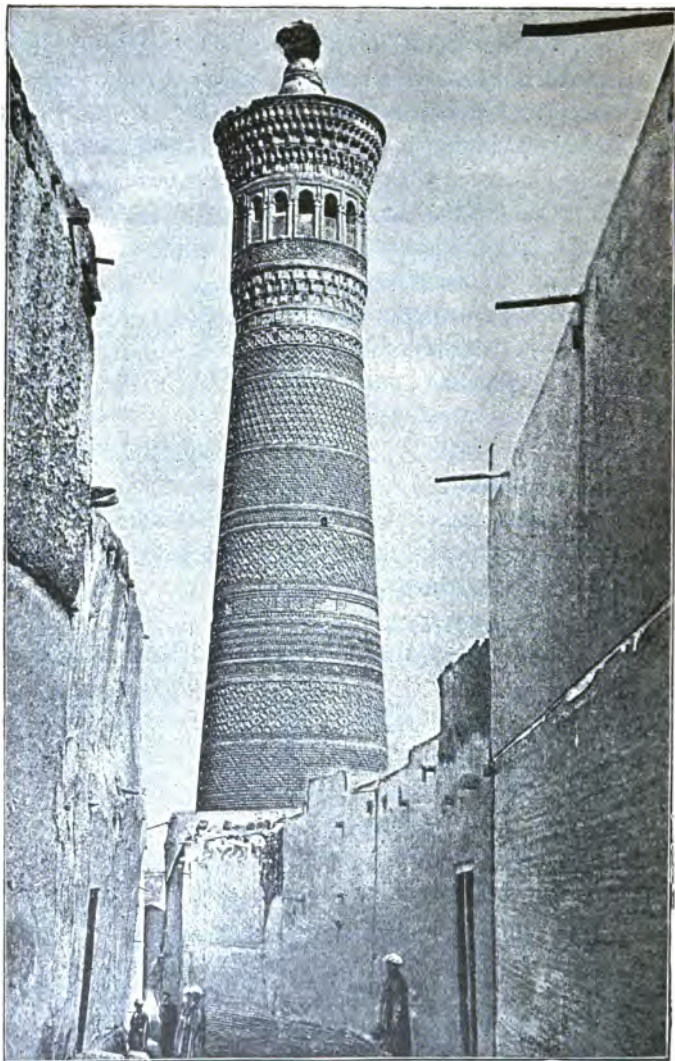
porphyry : a kind of granite con-

taining large crystals embedded in it. It may be red, purple, or green, and is highly valued for ornamental purposes.

LESSON 40

A WALK THROUGH BOKHARA

We may divide the Central Asian part of the Czar's dominions into three distinct regions : uplands abounding in fertile valleys in the south-east, sandy wastes



THE GREAT MINARET AT BOKHARA
(From '*Russia in Central Asia*,' by Lord Curzon)

between the uplands and the Caspian, and grassy steppes towards the north.

The valleys of the uplands, with their delicious climate and plentiful water supply, are among the most productive regions on the earth's surface ; hence this district from early times became the home of a numerous and powerful people, whose cities were the glory and pride of the Muhammedan world.

Let us wander through one of these old-world cities, Bokhara 'the noble,' the capital of the khanate, where the Amir still lives in considerable pomp, though he exercises only a limited authority. Formerly the hostility of the inhabitants was so great against all who were not of the same faith, that the city was comparatively unknown to Europeans : now, thanks to the railway and the supremacy of the Russians, the stranger may traverse its streets as free from molestation as if in any large town of the West.

Entering by one of the eleven gates which pierce the lofty ramparts surrounding the city, we make our way through a wilderness of crooked alleys with clay-built houses on either side. These houses have no windows bordering on the street, the only breaks in the walls being the closely-barred doors. On arriving at the principal thoroughfare, we find that it is lined with trees, with here and there pools of water, often stagnant, and sometimes used for washing as well as for drinking purposes. On either hand are seen numerous mosques and religious colleges, once gorgeously decorated, now mostly in a dilapidated condition. Prominent amid these relics of past grandeur is the graceful

shaft of the Great Minaret, towering upwards for nearly two hundred feet, and from the summit of which it was the custom for criminals to be thrown headlong down.

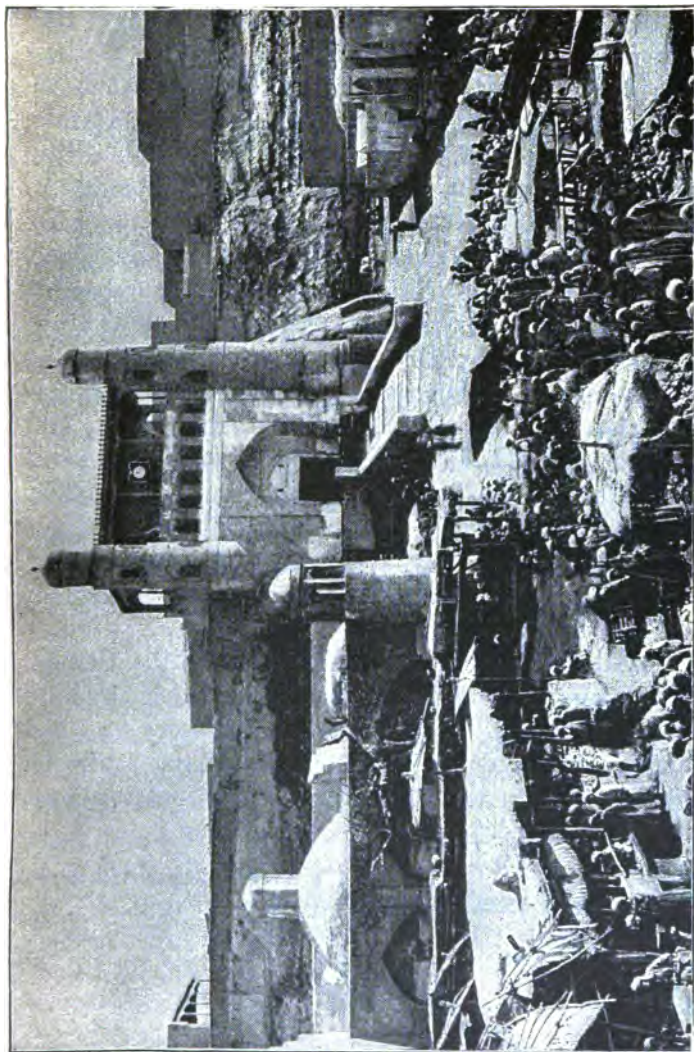
Along the street pass huge wooden carts, called *arbas*, lines of stately camels laden with bales of



THE MAIN STREET OF BOKHARA

(From '*Russia in Central Asia*,' by Lord Curzon)

cotton, and merchants and traders from almost all parts of Asia; dark-skinned Hindus with their red caste marks, haughty Afghans, keen-witted Persians, wild-looking Kirghiz, eagle-eyed Turkomans in their huge sheepskin bonnets. Mingled with this motley crowd



THE CITADEL OF BOKHARA
(From 'Russia in Central Asia,' by Lord Curzon)

are the handsome, dignified Bokharans, every man clad in a large white turban and a long brightly-coloured robe of cotton or silk ; some on donkeys, some on horses, and some on foot ; with an occasional female, so closely veiled and so wrapped up in her blue cotton gown as to be hardly distinguishable from a bundle of goods.

This busy street leads to the great market place, every foot of which is occupied by stalls and booths, which are frequently screened from the sun by awnings of reeds. From dawn to sunset the vast space is filled with a crowd of buyers and sellers. Here the inhabitants come for their provisions, meat, fruit, and flowers ; goods of all kinds being sold at the enormous bazaar, one of the largest in Asia. Fruit of excellent quality is exceedingly cheap ; melons of the finest flavour are sold for about the value of one farthing, while a penny would purchase a dozen pounds of luscious white grapes.

At the far end of this great square is the Citadel, standing upon a rocky eminence and surrounded by lofty walls. It was built over eight hundred years ago, and is of great size, containing the palaces of the Amir and his chief minister, three mosques, several public offices, and the State prison.

Amir : the ruler.

Khanate : the dominion of a khan,

as a prince or governor is termed
in Central Asia.

LESSON 41

THE TURKOMANS AND THE KIRGHIZ

The dreary deserts between the uplands and the Caspian are the home of the once-dreaded Turkomans, whose fierce raids formerly made them the terror of their more peaceable neighbours. Dotted all along the Persian border may still be seen the small watch-towers and the walled forts and enclosures, to which the inhabitants fled on the approach of these turbulent horsemen.

The circular tents or *kibitkas* of the Turkomans consist of a light framework covered with reeds and felt. The fire occupies the middle, and around are spread felt carpets, upon which the household sit. At night the tent is lighted by a rude earthen lamp, something like a teapot in shape, the wick passing down the spout.

If we are curious to see how these people live we must go into one of their tents. Upon entering we must be careful to remove our shoes ; but the hat should be kept on, as it would be considered an insult to uncover the head. Our host is lean and hardy in appearance, with frank, hospitable manners, and a bold, piercing glance. He wears an enormous sheepskin hat, something like a guardsman's bearskin ; a long bright-coloured tunic tightly girded at the waist, with a broad white sash, in which he carries his dagger ; while over this is a long-sleeved garment of darker-coloured stuff.

The mistress of the tent is very gorgeously attired. She has a long coarse silk garment of purple colour striped with black, reaching nearly to her feet, with close-fitting trousers drawn in at the ankles. Her head is covered with a kerchief of crimson silk, while round



TURKOMAN CHIEFS

(From '*Russia in Central Asia*,' by Lord Curzon)

her neck is a broad silver collar ornamented with stones and panels of embossed gold. Attached to the front of this collar by a number of silver chains is a cylinder of silver containing charms, worn as a protection against evil spirits. The front of her dress is ornamented with coins, and a flat silver box adorns each shoulder. In

addition, her hair is also decorated with coins, and bracelets encircle her wrists.

In spite of all these ornaments she has to work hard. Rising before the sun, she grinds the corn in a handmill, and heats the open-topped ovens in which the bread is baked for the morning meal. This bread is eaten hot and washed down with weak black tea. Sugar is regarded as a great luxury, and only used by the well-to-do; the person taking it places a small lump between the teeth, the tea being sucked through it. The mid-day meal generally consists of *pilaff*, a dish of rice or brownish oatmeal, with butter or salt fish boiled with it, a few raisins or plums being added on special occasions. The chief meal of the day is taken in the evening, when mutton or ducks often form a welcome addition to the pilaff. When cooked the food is piled up on one big dish, the inmates of the tent sitting round on carpets and helping themselves with their fingers.

The meal being finished, the water-pipe is produced. This is something like a large ink-jar, in the neck of which is a wooden stem two and a half feet high, surmounted by a brass cone of considerable size. This is partly filled with tobacco, and pieces of lighted charcoal are placed on the top. A hollow cane runs from the brass cone to the bottom of the jar, and another is attached to its neck, through which the smoker inhales the washed smoke.

The grassy steppes to the north of the Sea of Aral are inhabited by the Kirghiz, who are almost entirely breeders of stock; their wealth being estimated by the number of horses, camels, cattle, sheep, and goats which

they possess. They are excellent riders but poor walkers, living in their kibitkas in summer, and gathering together in encampments during the winter. Those who live on the plains call themselves Kazaks or horsemen, whence the Russian word 'Cossacks.'



Photo: Lewis Medland, F.Z.S.

LONG-TAILED SHEEP

Growing little or no corn, their diet is almost exclusively an animal one, the fat rumps of the so-called big-tailed sheep being their greatest delicacy, while *kumiss*, or fermented mare's milk, is their favourite drink.

(Partly adapted from O'Donovan's 'The Merv Oasis,' by kind permission of Messrs. Smith, Elder, & Co.)

bearskin: the tall head-dress of skins worn by the Foot Guards.
kibitkas: tents.

embossed: covered with raised figures.

LESSON 42

CAUCASIA : THE OIL WELLS OF BAKU

The lofty Caucasus range traverses this district from east to west, dividing it into two portions, known as Cis-Caucasia and Trans-Caucasia. The former, which slopes from the mountains towards the great European plain, is much colder and drier than the latter, and is mainly a pastoral district peopled by nomadic Kirghiz and Kalmuks. Trans-Caucasia, the country on the southern side of the Caucasus, is a widely different region. It is well watered, and its valleys enjoy a climate which is almost tropical. Its snow-capped peaks, vast glaciers, foaming torrents, lovely valleys, luxuriant forests, and rich pastures help to make some of the finest scenery in Asia.

The lowlands of Trans-Caucasia are most productive ; excellent crops of rice, wheat, maize, and millet are raised, while stone fruits such as peaches, apricots, cherries, and plums, together with the vine, grow in the greatest profusion.

The people of Caucasia are as varied as its products. The mountainous districts are inhabited by numerous tribes, who offered a long and desperate resistance to the Russians, and who are usually regarded as the finest representatives of the Caucasian race.

From a commercial point of view the most important part of Caucasia is the rich naphtha district lying around Baku. ' All round the ground is sodden with natural



TYPES OF CAUCASUS MAN AND WOMAN IN FULL COSTUME

issues of naphtha. In some places the earth is converted into a natural asphalte, hard in cold weather, but into which the foot sinks a couple of inches at midday in summer. Owing to the scarcity of water the streets are moistened with coarse black residual naphtha, a treacly fluid which effectually lays the dust for fifteen days. After this time a thick brown dust lies four or five inches deep, over which vehicles glide noiselessly, and which, when wind arises, makes the air thick with marly earth and bitumen. The least glow of sunshine fixes this indelibly in one's clothes. The surrounding district is almost destitute of vegetation, and in its midst are the wooden structures covering the oil borings. The odour of petroleum pervades the entire locality, and the ground is black with waste liquid and natural infiltrations. The boring is from ten to eighteen inches in diameter. A long bucket, fifteen feet in length, is lowered into the well and drawn up full of crude petroleum, fifty gallons at a time. This is poured into a plank-lined trough, by which it flows to the distillery. After distillation the thick brown fluid residue is used for watering the streets, for fuel on the Caspian steamers, and in the manufacture of gas.'

(Partly adapted from O'Donovan's 'The Merv Oasis,' by kind permission of Messrs. Smith, Elder, & Co.)

Kalmuks : a branch of the Mongolian race.
marly earth : earth composed of lime, clay, and sand.

infiltrations : the substances which have filled the pores of the soil ; in this case petroleum.

LESSON 43

CHINA : THE OCCUPATIONS OF THE PEOPLE

The Chinese Empire ranks as the third in point of size, and probably the first as regards population, among the great empires of the world ; it being estimated that no less than one-fourth of the whole human race live within its borders. It is a most remarkable country, with a history dating back long before that of the most early civilised European States. Its people, cut off by lofty mountains and barren deserts from the other nations of Asia, developed a civilisation peculiar to themselves, and have always endeavoured to exclude foreigners from their land. The Chinaman asks to be let alone, to live and worship in the same manner as his forefathers did. European inventions and improvements possess no charm for him, nor does he admit their advantages.

Nearly the whole of the wealth and population of the empire are contained in China proper, by far the richest and most productive country in Asia. Its marvellously fertile soil is so carefully tilled by the patient and industrious inhabitants, that it produces abundant crops of all the chief food plants of both the temperate and the torrid zones.

Most of the people are engaged in the cultivation of the soil in some form or other. In the productive yellow earth district great crops of wheat, barley, tobacco, and beans are grown. Further south, the low-

lying districts are largely given over to the production of rice, while on the higher grounds the cultivation of the mulberry tree, the cotton plant, the tea plant, and the sugar cane, together with the preparation of the products connected with them, finds employment for a vast number of people. Silk is still the most important article of export, exceeding in value all the other exports put together. The export of tea has greatly diminished of late years owing to the competition from India and Ceylon, while cotton is not exported at all, the Chinese not only using the whole of their own production, but also importing enormous quantities of cotton goods from England.

In the great province of Sechwan a curious and also important industry is the production of white wax. This wax, which is very highly esteemed by the Chinese, is produced by the action of an insect. The eggs, which are imported from another district, are placed upon trees in springtime when the leaves begin to shoot. The heat of the sun hatches the grubs, which at once begin to feed upon the young leaves. Later on the grubs bury themselves in a white wax secretion, coating the small branches sometimes to the thickness of an inch. In August the twigs are cut off and taken to the boiling houses, where the wax, as it rises to the surface of the water, is skimmed off and run into pans. When cooled, it is ready to be sent away and manufactured into candles.

Next in importance to the occupations connected with the soil is the fishing industry. The seas, rivers, and lakes of China swarm with fish, and millions of

Chinese are engaged in catching, by all sorts of clever devices, this important part of the Chinaman's daily food.

One of the most curious methods of fishing is by using tame cormorants. The birds perch on the bamboo poles placed along the sides of the canoe, and at a sign from their master they jump into the water and dive after fish, while the fisherman beats the surface with a long pole. When a fish is caught the bird brings it to its master and dives for another. But, you say, how is it that the bird does not eat the fish? Because a ring is fastened round its neck so as to prevent it from swallowing its catch, and also because the fisherman is careful to see that his birds are well fed.

LESSON 44

CHINESE DRESS AND A CHINESE DINNER

Throughout China the dress of the people is very similar, their clothing being chiefly made of cotton, the rich only wearing silk. Both men and women as a rule wear dark colours such as black, blue, or purple; persons of distinction wear red, while the royal family wear yellow; when a person is dressed all in white, it is a sign that he is in mourning.

The dress of an ordinary Chinaman consists of loose trousers, a long-sleeved flowing gown reaching nearly to his feet, and over this a waistcoat which is sometimes lengthened out into an apron. On his feet are clumsy-looking but comfortable shoes made of cloth



A CHINAMAN OF RANK
(From James's 'Lone White Mountain')

or satin, with thick white felt soles. He shaves his head, except on the crown, where the hair is allowed to grow long, so that it may be plaited into the long pig-tail of which he is so proud. In summer a Chinaman screens his head from the sun with an umbrella, only wearing his hat in winter. Coolies, however, who work in the open, generally wear large sun hats as a protection, and the official class always wear caps. In the northern districts, as winter draws near, the Chinaman wraps himself in a number of garments padded with cotton wool, one over the other, and if he be a man of wealth he also dons a magnificent fur coat.

A Chinese lady is clad in a long loose gown of silk or satin, over which is worn a jacket padded with cotton wool or lined with warm fur in the winter. Her black hair is tied up with ribbons, and ornamented with artificial flowers, and her tiny feet are shod with embroidered satin shoes, sometimes not more than three inches in length. Among the upper classes little feet are considered fashionable, hence the lady's feet were bandaged at the age of five so that they should not grow further. When she attempts to walk it is as though she had wooden legs, and a slight push might cause her to fall down.

Food is very cheap, and for the sum of five shillings a Chinaman can live in comparative comfort for a month. The chief article of diet is rice, which the poorer classes eat with vegetables, while those who can afford it add fish, pork, or poultry, ducks being in greatest request. In the grain-growing districts of the north, bread takes the place of rice, and, all over the

country, tea, taken without sugar and milk, is the universal drink.

A dinner at the house of a rich Chinaman is, however, a very long and elaborate meal, as the following description shows : ‘ We were shown first into the inner compartment, and seated on a divan, whilst they brought us tea, dried fruits, and confections, such as candied ginger, dried walnuts, mandarin oranges, almonds both salted and sugared, melon seeds, &c. We then adjourned to the outer chamber, where the dinner was spread on a table. But what a table ! It was just about three feet square, and on this were placed, as a commencement, no less than ten dishes, besides our own plates. These dishes or saucers of meats were replaced to the number of thirty. At this tiny table we were seated, and each was provided with a small saucer, three inches in diameter, half filled with dark-looking vinegar, into which we were supposed to dip everything before carrying it to the mouth. Of this I soon got tired, and began to eat things as they were—that is, as far as possible ; but most of the dishes were so disguised by confectionery and the style of cooking that we had to ask of almost every plate, “ What is this ? ”

‘ Happily the plates were so exceedingly small that to taste of each did not seriously strain one’s eating powers ; and by tasting first, and then asking what it was, all prejudice was taken away till it was too late to have any. But we discovered that among the dishes we had eaten were beans, garlic, a kind of seaweed cooked like seakale, and a greenish kind also ; likewise radishes cut in slices, swallows’ eggs boiled, and rissoles

of meat; various sorts of marine vegetables, and, I think, birds' nests.

'Towards the end of the feast appeared an urn containing the soup, in which were small pieces of meat, vermicelli, and rice puddings the size of tennis balls, for the eating of which they brought us chopsticks—I suppose that we might try our hands, for at the earlier part of the meal they had given us knives and forks.

'Chopsticks are a pair of round rods, rather longer but not quite so thick as lead pencils, which are both held between the thumb and fingers of the right hand, and are used as tongs to take the food and carry it to the mouth—an operation by no means easy to the unpractised.

'Each guest was also provided with a tiny cup, about an inch or more in diameter, and perhaps half an inch deep. Into this, at an early stage of the proceedings, was poured from a diminutive kettle hot Chinese brandy, tasting, it was said, something like whisky.'

(Adapted from Lansdell's 'Through Siberia,' by the kind permission of Messrs. Sampson Low, Marston, & Co.)

divan: a low cushioned seat, | rissoles: balls of minced meat.
generally along the wall.

LESSON 45

LEARNING AND RELIGION: THE GREAT WALL

Learning in China is held in the highest esteem, the only road to office being by public examination, and it

is only by passing a succession of these examinations that a Chinaman rises to be a mandarin or ruler. There are many grades of mandarins, who are distinguished by wearing round coloured buttons on their hats, each colour indicating a certain rank; thus a mandarin of the highest rank would be known by his red button.

The Chinese language has no alphabet, every separate word being represented by a different sign. It is very difficult to learn, as there are many dialects spoken in different parts of the country, and, in addition, the written language differs from the spoken language; thus a merchant at Peking might write a letter which a Cantonese could understand, but in all probability they would not be able to converse with each other without the help of an interpreter.

There are three principal religions in China—Confucianism, Taoism, and Buddhism—while there are a considerable number of Muhammedans in the north and west. The court and the learned class profess to follow the doctrines of Confucius, a wise teacher, who lived some two thousand years ago, whose teaching and writings are still held in the greatest veneration, and in whose honour stately temples have been erected in all the great cities of China.

The bulk of the people profess a corrupt form of Buddhism which, though its temples are neglected and its priests but little respected, is still the favourite creed of this strange people. A Buddhist monk has a clean-shaven head, and is clad in a yellow or grey robe worn both night and day. Around his neck is a rosary or

string of beads, with which he counts the number of his prayers. Their monasteries are often very large, one at Peking containing about twelve hundred monks.

The only religion, however, which has much hold upon the imagination of the Chinese is the worship of the dead. In every large house in China there is a room called the Hall of Ancestors. Here the family worship their forefathers by burning incense and gilt paper, and making offerings of food and wine to the spirits of the departed. Children in China regard their parents with the greatest respect, and the Chinaman believes that his future happiness largely depends upon the performance of the usual burial ceremonies, and the offering up of sacrifices by his sons.

A rich productive country like China, inhabited by a peaceful and industrious people, would naturally offer temptations to the warlike predatory tribes living on the barren table-lands of Central Asia ; hence, as a protection from the Turks, Mongols, and Manchus, the Chinese built the Great Wall.

This marvellous structure stretches along the northern boundary, from the Gulf of Pechili to the borders of the Tibetan plateau, climbing lofty mountains and spanning deep ravines for a distance of two thousand miles. It was built at different periods, some portions dating back for upwards of two thousand years. It consists in places of two and even three lines of wall, and near Peking is built of stone with embattled towers at frequent intervals. In places it has a height of fifty feet, with a paved walk fourteen feet wide at the top. As we recede from the capital it becomes less imposing,



PART OF THE GREAT WALL OF CHINA
(From James's 'Lone White Mountain')

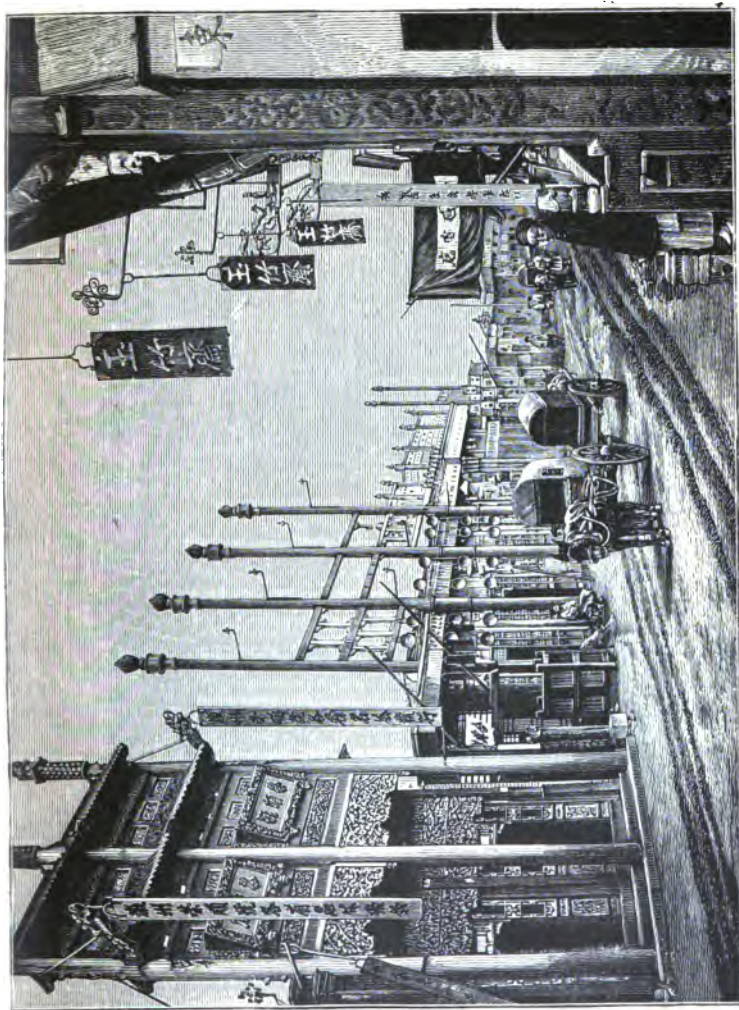
portions of it being faced with brick, and still further to the west it is chiefly an earthen rampart, easily scaled. Before the days of cannon it was no doubt a great protection against the raids of the Mongol horsemen. That it has not always proved effectual is seen from the fact that for the last two hundred and fifty years a Manchu emperor has ruled over China.

dialects : varied forms of a language.

LESSON 46

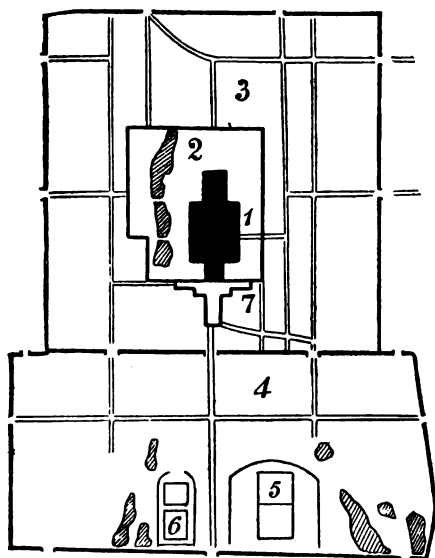
CHINESE TOWNS : PEKING AND CANTON

China is pre-eminently a country of great cities, there being at least a hundred, each of which contains over one hundred thousand inhabitants. Chinese towns are very much alike in appearance. The houses are so closely huddled together that, when viewed from above, little can be seen beyond the flat roofs, with here and there a pagoda or temple rising above the other buildings. In the northern towns the streets are wider and the houses lower than is the case farther south. All over, they are dirty and evil-smelling, the street being regarded by the Chinese as the place for the deposit of filth and refuse. The fronts of the shops, which are open to the street, are gaily painted and sometimes carved, with tall poles reared in front, as may be seen in the picture. Upon the numerous signboards and streamers overhanging the roadway the shopkeepers' names are painted in bright-coloured letters of red and gold.



A STREET IN A NORTHERN CHINESE TOWN
 (From *Jamet's 'Lone White Mountain'*)

Let us now visit two typical but widely differing cities—Peking in the north and Canton in the south. About forty miles to the south of the Great Wall stands Peking, noisy, dirty, dusty, and abounding with unsavoury smells, but at the same time one of the most



A PLAN OF PEKING

- | | |
|----------------------------|-------------------------------|
| 1. The Forbidden City. | 4. The Chinese City. |
| 2. The Imperial City. | 5. The Temple of Heaven. |
| 3. The Manchu City. | 6. The Temple of Agriculture. |
| 7. The European Embassies. | |

ancient and most wonderful capitals in the world. It consists of two distinct cities, the Manchu and the Chinese. The former, as may be seen from the plan, is nearly in the shape of a square, with lofty walls from forty to fifty

feet high, strengthened by huge towers placed at frequent intervals. This stupendous wall is over fourteen miles in circumference, and is pierced by nine gates—six



TEMPLE OF HEAVEN, PEKING

(From Thomson's *'China and the Powers'*)

opening to the outside, and the other three communicating with the Chinese city, which forms a huge oblong, with less imposing walls on the southern side. Originally the two peoples dwelt each within its own walls,

but the more numerous Chinese have now overflowed into the quarters of the conquering race.

Within the Manchu city is a second enclosure, called the Imperial City, surrounded by a wall about seven miles in circuit. Here are the barracks, temples, public



THE CHIEN MEN, ONE OF THE GATES OF THE TARTAR CITY, PEKING
(From Thomson's 'China and the Powers')

offices, and residences of the princes and officers of the court; and in the heart of the Imperial City, shut in with another wall and a wide moat, is the Pink Forbidden City, containing the yellow-tiled halls and palaces where the 'Son of Heaven,' as the emperor is termed by his people, lives in solitary state.

‘The streets of Peking are packed with a noisy crowd of blue-clad, long-tailed, close-shaven, loud-voiced men ; Chinese women hobbling along on their mutilated stumps ; here and there a spectacled mandarin in his screened sedan ; long strings of two-humped



TOWER ON WALL OF FORBIDDEN CITY, PEKING

(From Thomson's *'China and the Powers'*)

camels bringing coal and lime from the hills ; wild-looking Mongolians mounted on their shaggy ponies ; half-naked coolies wheeling heavy loads on their creaking barrows ; boys perched on minute donkeys ; ramshackle wagons drawn by mixed teams of mules, asses, ponies, and oxen ; dirty, long-haired, black pigs ; barking dogs ;

and, noisier than all, the heavy Peking carts drawn by the finest mules in Asia.'

Between Peking and the sea, where the Imperial Canal joins the Pei-ho, is the great seaport of Tientsin. It has a population of over a million, and since it was thrown open to foreign trade has become the greatest commercial centre in Northern China. Large vessels, however, are compelled to anchor off Taku at the mouth of the river, their cargoes being forwarded either by junks or by the short railway connecting the two towns.

The most interesting and by far the most populous city in China is Canton, with its two and a half million inhabitants. Situated on a navigable river, up which the largest ocean-going steamers can ascend, it has always been a great mart, and for many years was the only port in China where foreigners were allowed to trade. Its busy streets, lined with gaily painted and gilded shops, are so narrow that only one sedan chair can pass at a time. They are often covered in at the top with matting or thin boards, serving as a screen from the sun's rays, while at the ends are gates which are always locked at night. Though the streets are much cleaner than those of Peking, there is still but little attention given to the simplest sanitary regulations, and Canton, though exceedingly picturesque, is frequently ravaged by disease, the terrible bubonic plague being a constant visitor. One of the most striking features is the vast city of houseboats lining the river banks, on which a floating population of nearly half a million spend the whole of their lives.

Towards the mouth of the river is the rocky island

of Hong-kong, one of the great emporiums of the East. Extending for about four miles round the magnificent harbour lies the fine city of Victoria, with the houses of its wealthy merchants climbing up the steep hillsides.

mart : a place of trade, an emporium.		bubonic plague : a terrible disease common in the East.
--	--	--

LESSON 47

WINTER TRAFFIC IN MANCHURIA

Of the great dependencies of China, Manchuria is by far the most valuable. The soil is exceedingly fertile, yielding fine crops of millet, wheat, maize, beans, hemp, poppy, indigo, and many other useful plants. The forests of excellent timber, which cover a large part of the country, abound in game, while in the more remote districts the famous ginseng is found. So highly is this drug esteemed as a medicine by the Chinese, that the root of the wild plant fetches ten or twelve pounds per ounce. The rivers also are full of fish; sturgeon, salmon, and trout being especially plentiful.

These great natural resources, together with the healthy climate, have tempted many emigrants from the densely-peopled plains of Northern China, and the country is now mainly peopled by them; the Manchus forming but a small proportion of the inhabitants. The two chief towns are Mukden, a fine walled city with an estimated population of a quarter of a million, and Kirin, an important trading centre on the river Sungari.

Winter is the busy time for traffic, the people being fully occupied with their crops in summer. 'Strings of carts, a quarter to half a mile long, each vehicle drawn by eight or nine animals, and carrying upwards of a



COURTYARD OF A CHINESE INN

(From Price's 'From the Arctic to the Yellow Sea')

ton and a half of goods, speed lightly over the frozen ground in never-ending succession, laden with every conceivable thing. There are mushrooms, coffins, wine, oil, furniture, and deer-horns (used by the Chinese as a

medicine) going south ; while great bales of piece-goods, dyeing stuffs, tea, and pickles (which the Chinese consume largely) are travelling north. Occasionally a courier passes with his bag of letters, striding along at a steady pace of fully five miles an hour, eating his meals as he goes, and doing a good seventy miles a day.

‘The shops in the villages and stalls in the market towns are hung with fur caps, ear gloves, fur stockings, and shoes made of felt an inch thick, all suitable to the season. Grain dealers have piled great heaps of millet on the edge of the road, so that purchases can be made without stopping the train of carts.

‘All the inns have been painted afresh, the windows outside made air-tight with new clean paper, and the feeding troughs for the horses repaired. In the inn-yard are tethered rows upon rows of beasts, so closely packed there is scarcely room to pass between them, eating sweet millet-stalks, bought cheap from some roadside huckster. Inside the inn sit groups of jolly carters on the kang, devouring with good appetites bowls upon bowls of boiled millet or rice soup, stewed pork or mutton, ending with a glass or two of hot wine ; and then, whilst they are putting the horses to, the supercargo takes just a single whiff of opium to prepare him for going out again into the cold.

‘So determined are the Chinese not to idle, that youngsters who cannot get other employment are put to spend the day in the fields, dragging behind them fan-shaped rakes, which they trail over hill and dale, over ploughed land and waste, collecting every dried blade of grass, every dead weed, every fallen leaf. The collected

rubbish is piled in heaps and taken home, to be used as fuel or manure.'

(Adapted from '*A Journey in Manchuria*,' H. E. M. James.)

kang: a long brick stove running the length of the room, which it warms.

huckster: a hawker.

supercargo: the person who has charge of the sale of the goods.

LESSON 48

THE PEOPLE OF TIBET

The bulk of the people of this bleak country live in the river valleys of the south-east, where the inhabitants are mostly settled, living in houses, and engaged in agriculture and other industries. Their villages are usually built on rocky ledges high above the streams, where they do not cover any of the cultivated soil, of which there is so little in this rocky land. The water has consequently to be fetched, sometimes from a considerable distance. This heavy work is done by the women, who carry it in barrels strapped to their backs, the men considering it beneath their dignity to engage in this toilsome labour.

The nomadic Tibetans, who inhabit the wide-spreading highlands of the centre and north, rear yaks, sheep, and goats, and keep a breed of fierce mastiff dogs. In the spring their flat-topped black tents are shared with the young lambs and kids—an arrangement which does not add to the cleanliness of these dwellings.

Their chief utensils are a wooden bowl, a tea-churn, a kettle, and a butter box, together with a bag in which they carry their supply of parched barley. The

Tibetan's most cherished possession, however, is his gun, a matchlock with a long fork, used to support the weapon when fired.



A BUDDHIST MONK

(From James's 'Lone White Mountain')

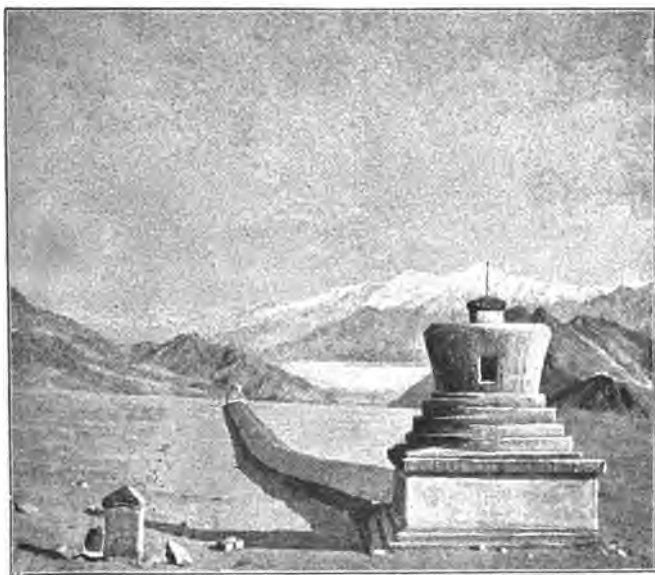
‘Their food consists principally of tea and *tsamba*, or parched barley, to which they occasionally add vermicelli, sour milk, granulated cheese, or boiled

mutton. The tea is first reduced to powder, then put in the kettle when the water is hot, and left to boil for about five minutes, a little salt or soda being added. Then it is placed before the inmates of the tent, squatting in a circle. Each person draws from the bosom of his gown a little wooden bowl, also used on very rare occasions as a washbowl, and fills it. Taking with his fingers a chunk of butter, he lets it melt in his bowl, drinking some of the tea and blowing the melted butter to one side, and then adds a handful of tsamba from the small ornamental bag in which it is kept. He deftly works with his right hand the tea, butter, and tsamba into a ball of brown dough which he eats, drinking as much tea as is necessary to wash down the sodden lump.

‘There are no regular meals: the kettle is always kept full, and each one eats when hungry. When one has eaten sour milk or anything which soils the bowl, it is customary to lick this clean, and, without further ado, put it back in the gown. If any mutton is to be eaten it is boiled in the tea-kettle, and each one picks out a piece from the pot, and, holding it in his hand, uses his sheath knife to remove every particle of meat from the bone, which is always cracked if it contains marrow, and, if a shoulder-blade, is put away for fortune-telling. The greasy hands are wiped over the face, or the boots if they require grease rather than the skin.’

The only town of any importance is Lhasa, ‘the place of God,’ situated on the northern edge of the Sanpu valley. The city itself contains about fifteen

thousand inhabitants, but on the outskirts are numerous large monasteries containing over twenty thousand monks or lamas. Here lives the real ruler of Tibet, the Dalai Lama, who is regarded by the people as a god.



MANI AND CHORTENS

The Mani is the wall of Praying Stones, and the tower at the end of it is a Chorten

(From Knight's 'Where Three Empires Meet')

The lamas, who are divided into two sects, red lamas and yellow lamas, according to the colour of their robes, exercise very great influence over the people. Their monasteries, often containing a large number of monks, are generally placed in a conspicuous

position ; sometimes being carved out of the cliff itself.

At the entrance of the monasteries are large praying wheels. These are cylinders containing rolls of prayers, which every one turns as he passes, hoping thus to bring himself nearer the Buddhist's heaven. In some places these prayer wheels are turned by water-power, in others wind prayer wheels are set up, while the people themselves carry small hand wheels which they are constantly twirling.

Other curious sights in Tibet are the walls of praying stones. The one shown in the illustration is about eight feet high and a mile in length. Each of the large flat stones, that form the sloping roof of the wall, is covered with carvings and prayers, the work of pious monks. The Tibetan believes that every one of the stones in the wall will pray for one of the faithful whenever he walks by them, provided he keeps the wall on his right hand. Hence the road divides at a praying wall, a path on each side, to accommodate travellers from either direction. Sometimes at the end of the wall is a *chorten*. After the body of a Buddhist has been burnt by the lamas, some of the ashes of the dead man are mixed with clay and moulded into a little idol, which is then placed in the *chorten*.

(Partly adapted from Rockhill's '*Land of the Lamas*.')

vermicelli : dough forced through small holes so that it takes a thin worm-like form.

chorten : a building to hold the ashes of the dead.

granulated : made into small pieces.

LESSON 49

THE KOREANS

Korea is the mountainous peninsula lying between the Yellow Sea and the Sea of Japan. Until the war between China and Japan, in 1894-5, Korea was a vassal State to China ; since then Japanese influence has predominated.

It is only within very recent years that we have known anything of this mysterious country, from which strangers were jealously excluded. The people are tall and well built, indolent and superstitious, and, though dirty, are always clad in white cotton garments. These white robes, together with the broad-brimmed hats, which are always worn, give them a very peculiar appearance ; at a distance you would imagine the men to be women.

‘ The villages are collections of mud huts, thatched with straw, warmed by flues running beneath the floors, and surrounded by a wattled fence of branches or reeds. On the clay floor outside are usually seen drying a matful of red chillies, or of millet and rice grains fresh threshed by the flail ; long strings of tobacco leaves, suspended in festoons, have been picked from the garden plot hard by, from which also a few castor-oil plants are rarely absent. A small sty of black and abominable little pigs usually fronts the road, on which the half-naked children are disporting themselves. Inside, the dour-visaged females are performing the work of the household, or are grinding, threshing, or winnowing the grain on the open threshold. The

men are away in the rice fields, or among the crops of millet, beans, and buckwheat, which are the staple cereal produce of the country.

‘A notable manufacture is paper, which is made from a variety of substances, usually, however, from the inner bark of the mulberry tree. After it has been soaked in oil it becomes exceedingly durable and water-proof. As such it is used instead of carpets on the floors, instead of paper on the walls, instead of glass in the windows, and instead of whitewash on the ceilings. Clothes, hats, shoes, tobacco pouches, and fans are made of it; so are umbrellas, lanterns, and kites. Rooms are divided by paper screens; clothes are kept in paper chests; men travel with paper trunks; children play with paper toys.’

The three most important towns are Seoul, Chemulpo, and Fusan. Seoul, the capital, is said to contain a quarter of a million people. It is a walled town with massive-looking gate towers and royal palaces built somewhat after the Chinese fashion. Its three main streets are wide but dirty; the rest are narrow alleys, offensive alike to the eye and the nose. Chemulpo, the port of Seoul, is situated on the Yellow Sea, and since it was first opened to foreign trade, in 1883, has become the most important commercial town in the kingdom. Fusan, in the south of the peninsula, has an excellent harbour and a flourishing settlement of Japanese traders and fishermen, and has for centuries been the chief centre of trade with Japan.

wattled: twigs interwoven one
with another.

dour-visaged: sour-looking.
chillies: a kind of red pepper.

LESSON 50

JAPAN

Japan, 'the land of the rising sun,' consists of some four thousand islands, stretching for two thousand miles from Kamchatka to the Philippines, and enclosing three seas: the Sea of Okhotsk, the Sea of Japan, and the Yellow Sea.

The principal part of the empire, however, is the large island of Hondo, which is about the size of Great Britain, and the adjacent islands of Yezo, Kiushiu, and Shikoku. To the north of these lie the Kuriles, while to the south are the Riu-kiu islands and the large island of Formosa.

In so extensive a stretch of land there is necessarily a great variety of climate, and while Yezo has winters of almost Arctic severity, Formosa is covered with a tropical vegetation. There are striking differences even between the east and west coasts of Hondo. The warm Kuro Siwa, the 'gulf stream' of the Pacific, raises the temperature of the eastern side of the island much above that of the mainland, while the western side is so chilled by the cold current from the north that the snow lies deep during the winter months, and the rivers and canals are frozen over.

Japan is a land of mountains, and many of the peaks are active volcanoes. The loftiest summit is the beautiful Fuji-san, whose snow-capped cone, rising in solitary grandeur from the plain, is the most con-

spicuous object in the country. The largest volcano, however, is Aso-san in Kiushiu, the crater of which is said to be twelve miles in diameter.

The mountainous nature of the surface causes the rivers to be mere torrents, useless for navigation, and



FUJI-SAN, AS SEEN FROM A VILLAGE ON THE TOKIADO
(From Bird's 'Unbeaten Tracks in Japan,' by kind permission of Mr. John Murray)

so charged with silt that they choke up the harbours at their mouths.

Vegetation is wonderfully varied, the highlands being clothed with forests; while the lowlands, which form a comparatively small portion of the surface, are

tilled with such care and skill that sufficient food is raised for the teeming population, and the country looks like a well-kept garden.

Rice is the principal crop, and with wheat, millet, vegetables, fruit, and fish, forms the chief food of the people. Next in importance to rice comes the cultivation of the tea plant and the mulberry tree. Other valuable



Photo: Frith & Co.

A SCENE IN YOKOHAMA

plants are the camphor tree with its enormously thick trunk, and the lacquer tree, which furnishes the material for lacquering, one of the most notable of the Japanese industries. The plant which enters most extensively into the every-day life of the people is the tall, slender bamboo. Its seeds are used as food, its stalks are made into pulp for paper, its fibres are made into mats and sails for junks, its joints are used as vessels for carrying

and pipes for conveying water ; in addition, furniture and the framework of the houses are almost entirely made from this useful plant.

The largest town in Japan is Tokio, the capital, with a population of a million and a half. Here is the palace of the Mikado, situated in the midst of vast and beautiful gardens. Ships cannot reach the city, owing to the



Photo: Frith & Co.

A STREET IN NAGASAKI

silting up of the harbour ; and Yokohama, about eighteen miles nearer the sea, is the greatest centre of trade with European countries.

Next in importance is the beautiful city of Ozaka, crossed in all directions by numberless canals, and now a great centre of the cotton-spinning industry. Like Tokio, its harbour is obstructed with sandbanks,

and most of its shipping trade is carried on at Kobé, a large port on the opposite side of the bay.

A little north from Ozaka is Kioto, the ancient religious capital of Japan and the former residence of the Mikado. It is a centre of learning and religion, and is always crowded with Buddhist pilgrims.

Formosa, the 'Beautiful,' as the Spaniards first called it, now forms part of Japan. It is crossed from north to south by a lofty range of mountains containing several volcanoes. This range slopes gradually on the western side to a fertile plain, where the Chinese settlers grow fine crops of rice, tea, sugar, and all kinds of vegetables. On the eastern side the mountains are much steeper, and their forest-clad slopes are inhabited by wild Malay tribes. The chief town on the island is Taiwan, a densely-peopled Chinese city.

lacquer: a tough hard varnish
used to coat wood and metals.

Mikado: the title of the ruler of
Japan.

LESSON 51

A WALK THROUGH A JAPANESE TOWN

The Japanese, after centuries of isolation, have of late years adopted Western ideas. They have built schools and colleges, ships and engines, cotton factories and railways. They have formed a powerful army, a great navy, and have even adopted a form of constitutional government; the Mikado being assisted by two Houses of Parliament.

Let us, however, get away from this European

varnish, and mix in the streets with this pleasant, friendly, and polite people. 'The first that comes along is a Japanese lady, attired in silken robes, with wooden clogs on her feet to protect her snow-white socks from the mud which the recent shower has caused. Her long sleeves hang down from the small brown wrists and



A TOKIO CAB

(From Arnold's 'Seas and Lands')

arms to her knees. In these receptacles she keeps sheets of soft tough paper, with which she blows her small nose and wipes the dust from her dainty skirts, also her cards, her chopsticks, perhaps her special porcelain cup for tea. She has little clear-cut almond eyes, a laughing face, and the whitest shining teeth. Her hands are small and fine, and in her glossy black

hair she wears a red camellia with ever so many little fantastic pins stuck up and down the smooth waves of it.

‘Then the *jinriksha* men! You will almost die with laughter when you call one from the stand where the little machines are ranged like fairy hansom cabs and start for your first ride. With a hat on his shaggy head like a white washing basin, with a red or blue blanket over his shoulders, his little legs tightly cased in black cloth drawers, his feet thrust into straw sandals, his name and number gaily painted on his back, “San-ju-ban,” or whatever else his ticket proclaims him, starts off at a run with the ridiculous perambulator into which you have entered, and whisks you here, there, and everywhere for fifteen cents, his little hoofs twinkling between the slender shafts bedecked with bands of tin-foil.

‘Then the children. The babies are one and all slung upon the back in the deep fold of the *kimono*. There they sleep, eat, drink, and wobble their little shaven pates to and fro, with jolly little beaming visages, and fat brown hands and arms. The children are friends of everybody, and play ball and fly kites in the most crowded thoroughfares, never rebuked, never ill-treated, with grave happy ways and long flowing robes, which give a quaint dignity to even the youngest.

‘Coolies go about carrying huge burdens on balanced bamboo baskets; fishermen hawk odd-looking kinds of fish in white tubs; the blind shampooer wanders up and down, tootling a plaintive note upon a double pipe of reed, to notify that he is ready to knead and pummel

anybody troubled with rheumatism ; the physician passes with his drug-case hitched into his waistband ; the miller, standing behind the string-screen of his



THE BABY

(From Arnold's 'Seas and Lands')

shop, grinds rice between two stones, his brown limbs powdered with the fine flour ; the bath-man lifts the blue cloth curtain of his establishment, and begs you to "make honourable entrance." If you do you will see

all sorts of people amicably tubbing together, and will be yourself invited to disrobe and sit in a tub, which will scald you, if not heedful, for the Japanese take their baths at nearly the temperature which boils an egg. And the little shops, and the little goods, and the little funny articles bought and sold ; and the little placid, pleasant folk laughing and trotting about the ways, and the little trees growing in every nook, and the little absurd cakes and little morsels of food, and little cups and little bowls which they use.'

*(Adapted from 'Seas and Lands' by kind permission of
Sir Edwin Arnold.)*

fifteen cents : 7½d.

kimono : an outside robe worn by
a Japanese lady.

LESSON 52

A COUNTRY RIDE AND A JAPANESE INN

From this picture of town life let us turn to the country. 'On entering our railway carriage we perceived a tea-tray thoughtfully provided by the company. There stood the boiling water, in a chased bronzed kettle, the tiny dainty tea-pot with green tea leaves ready for infusion, and the small cups in their stand, so that, free of charge, we might sip tea as we started.

'The line passes through low-lying fields with harvests of rice, tobacco, cotton, and the huge radish, fringed with waving thickets of bamboo, and populous with villages of little huts all built upon the same pattern, with fronts of framework and paper, and roof of fine shingle or thatch. Everywhere, indeed, is seen the

chrysanthemum—the imperial blossom of Japan—growing at the cottage door, by the well, in the temple yard, beside the graves, and even in the paths intersecting the rice fields.

‘We arrive in the dark at the end of our railway journey, hand our tickets to the collectors, who bow



A ROADSIDE TEA-HOUSE

(From Bird's 'Unbeaten Tracks in Japan,' by kind permission of Mr. John Murray)

down to the platform, and our light baggage and ourselves to jinriksha men, who trundle away up a street glittering with paper lanterns, and at last are brought up with a shout of arrival at a Japanese inn. The

proprietor, his wife, and the servants bowing low, give a pleasant welcome. Shoes are slipped off and indoor slippers offered, into which thrusting your feet, you slide and glide with many a bow and "Thank you" over the spotless mats and up the shining ladder to the blamelessly clean pigeon-loft assigned for your use. Squares of padded cloth are placed on the floor, and the "firebox" is brought in and set in the midst, with two brass knitting needles whereby to stir and trim the glowing charcoal. The young waiting girl next presents, always on her knees, tiny cups of pale yellow tea unsweetened and unskimmed, and, learning that you will partake of dinner, goes to command it.

'Presently the repast arrives. First appears a small table about eight inches high, upon which are placed fresh cups and chopsticks, the two sticks still joined at the end, so that you may know they are fresh and unused. You separate them as a hungry man takes up his knife and fork, and are then ready for the "honourable tray" of red or black lacquer, which is slid within your reach by the kneeling and bowing waiting maid. On each of our trays was a little bowl of soup with shreds of vegetables, a saucer of pickled celery and radish, a minute slab of boiled trout, another saucer holding shreds of cold chicken, and a wooden bowl with a rather doubtful composition of some sort of whey and white of egg. Between the trays a large wooden tub of hot boiled rice, admirably dressed, was set, with a fresh pot of tea. A plate of cakes also appeared, and when we had asked for and obtained salt and bread—articles not usually furnished—there was enough to eat, and of no

bad quality. The hot white rice is the real mainstay of the meal, which being removed, the tobacco-box and small bamboo pipes succeed.



A MUSUME (A JAPANESE MAID-SERVANT)

(From Arnold's 'Seas and Lands')

‘By-and-by beds are prepared by drawing out from a hidden cupboard many quilted mats and a little bolster about the size of a Bologna sausage, stuffed with rice blades. A paper lamp is then put in one corner of the

room, the charcoal brazier is replenished, and you are invited to take "honourable repose."

'After breakfast the next morning we continue our journey with two men to each jinriksha, one in the shafts and the other pushing or pulling with a cord. The road, which is bordered with stately trees, passes through a fairly populous country. In the villages the men are reaping rice, knee-deep in its wet bed; the women, old and young, are threshing out the rice bundles with curious revolving flails, or beating bunches of millet and other grains on the top of a web, which lets the seed fall through, and thus combines threshing and winnowing. Lightly-built carts, drawn by ponies led by a nose-string, convey rice, straw, shingles, petroleum for the household lamps, and vegetables; but much of the traffic is done with pack animals.'

*(Adapted from 'Seas and Lands' by kind permission of
Sir Edwin Arnold.)*

LESSON 53

THE MALAY ARCHIPELAGO: PRODUCTS AND PEOPLE

Between Asia and Australia lies a widely-spread mass of islands, several of which are of great size. The plants and animals of the western islands resemble those of Asia, while those of the eastern islands are like those of Australia; hence we conclude that the former once formed part of Asia, and that the latter were united to Australia. Another reason for thinking

that this was the case is that, if the bed of the sea were raised six hundred feet, there would be dry land between the western islands and the Indo-Chinese peninsula, while New Guinea would form part of Australia.

The whole archipelago is mountainous, and the outer ring of islands—the Philippines, the Moluccas, and the Sunda group—are particularly liable to earthquake shocks and volcanic outbursts. In 1883 one of the most terrific eruptions ever recorded occurred in the Sunda Strait, between Java and Sumatra. The small island of Krakatoa was entirely blown away; the sea in a huge wave overwhelmed the coasts of Java and Sumatra, drowning thirty thousand people, while the dust from the outbreak was observed falling on vessels one thousand miles away.

Lying on either side of the equator, and having a hot and moist climate, these lands of continual summer are covered with a most luxuriant vegetation. Where they are settled and cultivated, as in Java, rich harvests of rice, maize, sugar-cane, coffee, tea, cinchona, tobacco, indigo, cotton, spices, and other tropical products are obtained. In the wilder parts the natives grow plants which produce a maximum of food with a minimum of labour, such as bananas, cocoanuts, sago, and many tropical fruits.

With the exception of Northern Borneo, which is under British control, and the Philippines, which since 1898 have belonged to the United States, the whole of this great archipelago belongs to the Dutch. The island of Java, though not the largest, is by far the richest and most important part of their possessions.

Here, on an area somewhat less than that of England, there is an industrious native population of about twenty-seven millions, far exceeding that of all the other islands taken together, and who export from the great ports of Batavia and Surabaya much sugar, coffee, tea, cinchona, and rice. Sumatra, though more than three times as large, does not contain much more than one-tenth of the population of Java. Coffee, tobacco, and tin, which is obtained in great quantities from the neighbouring islands of Banka and Billiton, are the chief exports.

Borneo, the largest of the Asiatic islands, is divided between the English and the Dutch. The coast districts are chiefly peopled by Malays; the vast forests which cover the interior are inhabited by many half-savage tribes, of whom the Dyaks are the most interesting. These forests are remarkably rich in excellent fruits, so varied and numerous in places that the woods are natural fruit orchards, the home of that great man-like ape, the orang-utan or 'wild man of the woods.'

Sarawak, the best known part of British Borneo, was acquired in a somewhat romantic fashion. In 1842 a young Englishman, James Brooke, who was cruising in his yacht among these islands, offered his services to the native ruler, and was so successful in suppressing a serious rebellion that he was made governor over the district. With some slight help from the British Government, the haunts of the pirates infesting these seas were destroyed, the wars between rival tribes prevented, and Sarawak became a model of a peaceful

native State The chief export is sago, obtained from the pith of a kind of palm. When felled, the trunks are split in halves, and the pith cut out in thin layers, placed in a vat, and trodden upon. Water is occasionally poured on the pulp during the process, and the



A VILLAGE NEAR SANDAKAN, BRITISH BORNEO

fine starch is washed through the strainers which cover the bottom of the vat. After a further washing, the starch is dried, and packed as sago for shipment to Singapore.

The coast-dwellers, an amphibious race, live in curious

houses built on piles driven into the ground below the surface of the water. They are entirely constructed of wood and palm leaves, with their floors raised about two feet above high water mark. Brunei, the largest town in Northern Borneo and the residence of the native sultan, has about twenty thousand inhabitants, all living in these pile dwellings.

The Dyaks are a well-built active race, with good features and light brown skins, decidedly intelligent, and exceedingly truthful and honest. Formerly the river Dyaks were very warlike, and in their long canoes, sometimes large enough to carry eighty warriors, made fierce raids upon their neighbours. Every village had its head-house, where the dried and smoked heads of the slain were kept, and the greatest warrior was he who could show the largest number of these ghastly trophies hanging from his roof.

This constant state of warfare was the reason why the whole tribe lived together in great houses, built on high posts and sometimes large enough to accommodate as many as sixty families. In the front of the house is a large platform, to which access is gained by a ladder made by cutting notches in the trunk of a tree. Here the women beat the rice from the husk, cook the meals, and weave their cloth; while the men make their fishing nets, mats, implements for tilling the soil, swords, spears, and the long blowpipes, which they bore with considerable skill, and from which they discharge their poisoned arrows with such deadly effect. Behind this common workshop is one big room running the whole length of the house, serving as a general store-room and

as a sleeping place for the young men and boys. At the back of this long room and communicating with it are a number of smaller rooms where the rest of the family sleep.

LESSON 54

THE TRAFFIC AND TOWNS OF IRANIA

Traffic is carried on either by camel or mule caravans, there being no wheeled vehicles ; if, however, the traveller is in a hurry, he may travel along the few post roads on horseback, riding from one post-house to the next, where he procures fresh horses and so speeds on his journey. A post-house is generally a rectangular structure of mud walls surrounding a building something like a small fort. Within are long stables, filthy and dark, where horses and postboys sleep. Over the gateway is a square unfurnished room, dirty, draughty, and terribly cold in winter, which is reserved for guests.

One of the oldest and most frequented roads is the great through route between India and the West, which passes through the commercial city of Tabriz, along Northern Persia to Meshed, the capital of the province of Khorassan. Formerly the journey by this road was attended with considerable danger through the constant slave raids of the Turkomans, and the great pilgrim caravans to Meshed travelled with a strong escort of soldiers. The subjugation of the Turkomans by Russia

and the formation of the Trans-Caspian railway have, however, put an end to these disorders.

From Meshed the road leads to the fortified city of Herat, which is situated at the mouth of the only valley



A PERSIAN POSTMASTER
(From 'Persia,' by Lord Curzon)

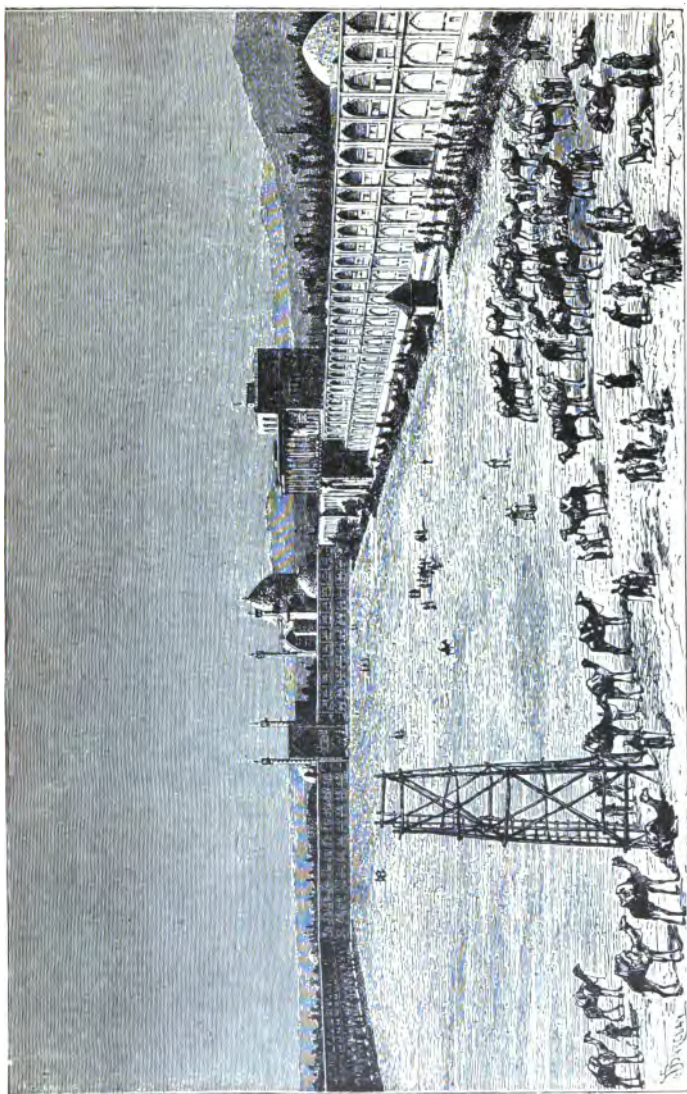
capable of supplying large stores of food or forage. Here the road divides, one branch passing over a mountainous and difficult country inhabited by fierce tribes, through the Bamian Pass to Kabul, and

thence to Peshawur; the other turns south-east by Kandahar and the Bolan Pass, through which a railway has now been carried to the fortress of Quetta.

Meshed, the only large town in Eastern Persia, is regarded as the most sacred city in the country. Here, canopied by a magnificent mosque, lies the body of one of Persia's most revered saints, the Imam Reza. Though plundered several times, this famous sepulchre still contains an enormous wealth of gold and jewels, the offerings of pious Moslems from all parts of Islam. Three doors lead to the shrine, one of which is of silver, another of gold plates studded with precious stones, while the third is covered with a carpet stitched with pearls. Every year over a hundred thousand pilgrims visit this holy city, and, as at Kerbela, the bodies of thousands of believers, often carried for hundreds of miles, find their final resting place in its hallowed soil.

Between Tabriz and Meshed, in the midst of a barren steppe, lies Teheran, the present capital of Persia—a city where wide squares, streets bordered with trees, and glass-windowed shops, after the European fashion, are strangely mingled with the narrow lanes and mud hovels, common to towns in the East.

The most interesting building is the Royal Palace, which occupies a large area formerly known as the Ark or citadel. Here is the famous throne room, where on public occasions the Shah, seated on a white marble throne, may be seen by his subjects, just as Eastern rulers displayed themselves to their people thousands



THE ROYAL SQUARE AT ISPAHAN
(From 'Persia,' by Lord Curzon)

of years ago. In a great hall of the palace are the royal regalia, and an enormous collection of gems, jewelled weapons, royal crowns, and uncut jewels of fabulous value. In the centre is a throne beautifully enamelled, and covered with rubies and emeralds. One



BRIDGE OF ALI VERDI KHAN

(From 'Persia,' by Lord Curzon)

of the most remarkable objects in the room is a globe constructed of precious stones; the sea is made of emeralds, England and France of diamonds, India of amethysts, and Persia of turquoises. In the council chamber is a still more magnificent seat, the so-called Peacock Throne, overlaid with plates of gold and

covered with precious stones, principally rubies and emeralds. It is said to be valued at 200,000%.

Southwards from Teheran is the important city of Isphahan, the former capital, and next to Tabriz the chief centre of trade in Persia. In the centre of the city is a vast space, known as the Royal Square, its sides bordered by the king's palace, the chief mosque, the great bazaar, and other imposing buildings. There are also a number of fine bridges crossing the river, one of which, the bridge of Ali Verdi Khan, is perhaps the most imposing bridge in the world.

Still further south, in the midst of vineyards and rose gardens, is Shiraz, and about forty miles away the impressive ruins of Persepolis, where the great Persian monarchs, Darius and Xerxes, once ruled in pomp and state.

Moslems: Muhammedans.

Islam: the countries occupied by Muhammedans.

amethyst: a purple stone.

turquoise: a blue stone: the best are found in Persia.

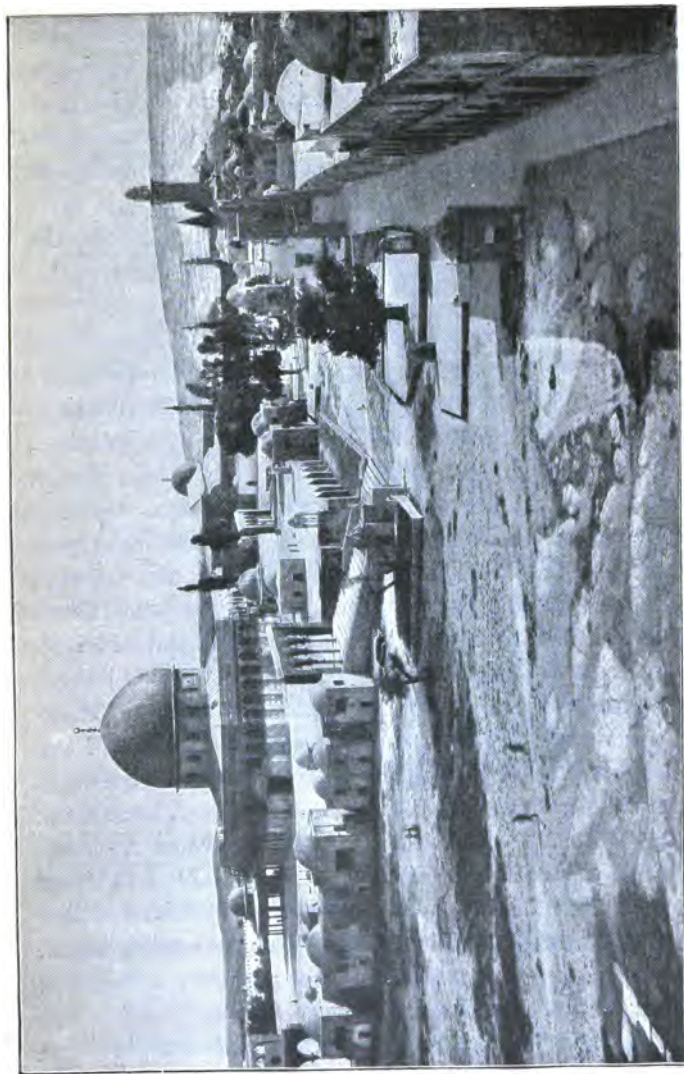
LESSON 55

THE HOLY LAND AND ARABIA

Between the Mediterranean Sea and the Syrian Desert is the Land of the Bible: bare, deserted, and poverty-stricken, yet rich in its sacred associations. A few of the Bible cities, such as Jerusalem and Damascus, are still places of importance, others are now only represented by a few squalid huts, while in many cases mounds of sand-covered ruins are the sole indications of the sites of once prosperous towns.

On the rugged table-land between the Jordan and the coast, surrounded on three sides by deep ravines, stands the sacred city of Jerusalem—holy alike to the Jew, the Christian, and the Moslem. Every year it is visited by thousands of pilgrims from all nations, and since the opening of the railway from Jaffa it has greatly increased both in size and population. To the Christians the Mount of Olives, the Garden of Gethsemane, the site of the Temple, Brook Kedron, the Pools of Bethesda and of Siloam, and the magnificent Church of the Holy Sepulchre are among the most interesting spots. Viewed from the Mount of Olives the most striking building is the famous mosque of Omar. This splendid sanctuary stands in the midst of a great enclosure, and was built to commemorate the capture of the city by the Arabs in 637 A.D.

Damascus, the capital of Syria, claims to be the oldest city in the world, since as far back as the time of Abraham we read of his servant as 'Eliezer of Damascus.' The striking contrast between its well-watered gardens and fruit-groves and the parched deserts of Syria may well have caused the Arabs to regard it as the fairest spot on the earth. It is still a large city, though the great pilgrim caravan, which every year starts from Damascus for Mecca, is not now nearly so important, many pilgrims preferring to take the easier journey by sea through the Suez Canal to the port of Jedda, and thence to the 'holy cities.' It is now an easy matter to reach this ancient city, as a railway has been carried from the important port of Beirut, over the Lebanons, and through Damascus into

**JERUSALEM**

(From 'A Winter Pilgrimage through Palestine,' by H. Rider Haggard)

Northern Palestine, whence it is proposed to extend it forwards to Acre.

The western side of Arabia forms the Turkish provinces of El-Hejaz and Yemen. El-Hejaz, the land of the pilgrimage, consists of a hot, barren, sandy plain and the highlands at the back of it. It is important from the fact that here are the 'holy cities,' Mecca the birthplace of the Prophet, and Medina the place of his burial.

Yemen, from its nearness to the Indian Ocean and its great elevation, has a good supply of water, and its fruitful valleys support a settled and industrious people, who grow corn, excellent dates, grapes, peaches, and other fruits, and above all the far-famed 'Mocha coffee.' The neighbouring desert lands to the west have for ages been noted for their sweet-smelling and medicinal plants ; and frankincense, myrrh, gum, balsam, and senna are still exported in considerable quantities.

In the centre of Arabia lies the table-land of Nejd, almost completely encircled by deserts of loose red sand. These terrible deserts are most difficult to cross, the shifting sands being heaped up by the wind into ridges of two and three hundred feet in height, with hollows between, in which the traveller finds himself enclosed, as it were, with walls of burning sand. Here, protected by these natural defences, the Arabs are entirely free from Turkish influence. Wherever irrigation is possible there are numerous villages, inhabited by settled Arabs, who grow corn and fruits, and rear horses, asses, and camels of the finest breed.

Elsewhere the trackless plains of Arabia and

Mesopotamia are peopled by nomadic Bedouin tribes, who migrate with their sheep, goats, and camels from their winter to their summer pasturages according to the season. Some of these tribes own enormous numbers of camels: one powerful tribe in the Syrian



A BEDOUIN CHIEF OF PALMYRA

desert is said to have at least a hundred and fifty thousand of these useful beasts.

The long, low, Bedouin tents are made from the hair of the black goat, and are sometimes so large that they are divided into three compartments—one for the men, one for the women and children, and one for the

horses and cattle. They do not contain much furniture : a few carpets for sitting upon, camel saddles for reclining against, a few cooking utensils, and a coffee-pot for preparing their favourite beverage, supply most of the owners' needs.

The food of these people consists chiefly of boiled rice, served with clarified butter or minced mutton, hard cakes of dry bread, and dates, washed down with water, and followed by a cup of coffee taken without milk or sugar.

The dress of the men is picturesque and well suited for the climate. The head is covered with a close-fitting skull-cap, over which is worn a large square kerchief, generally of a dull red colour ; this is folded in the shape of a triangle, and held in place by a twist of wool or a bit of rope ; the kerchief fits the head closely behind and projects over the forehead in front, thus shading the eyes from the fierce sun. A tight-sleeved cotton shirt covers the body, reaching nearly to the feet, and over this is a long short-sleeved cloak of camel's hair. The soles of the feet are protected by sandals, and round the waist is a sash carrying the dagger.

frankincense : a fragrant gum, burnt as incense in religious ceremonies, or for fumigating.

balsam : an aromatic resin.

myrrh : a yellowish-brown gum of

an aromatic odour and pungent taste.

clarified butter : butter made clear by boiling, and thus made into a kind of oil.

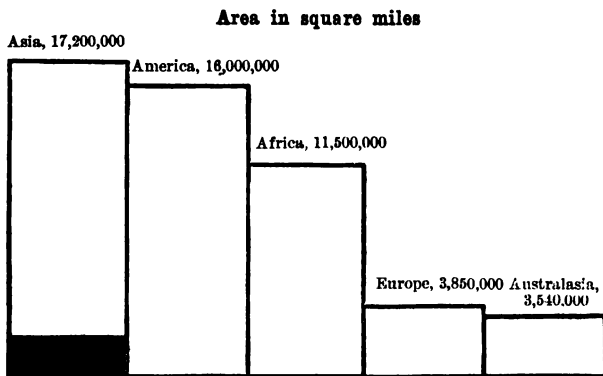
APPENDIX

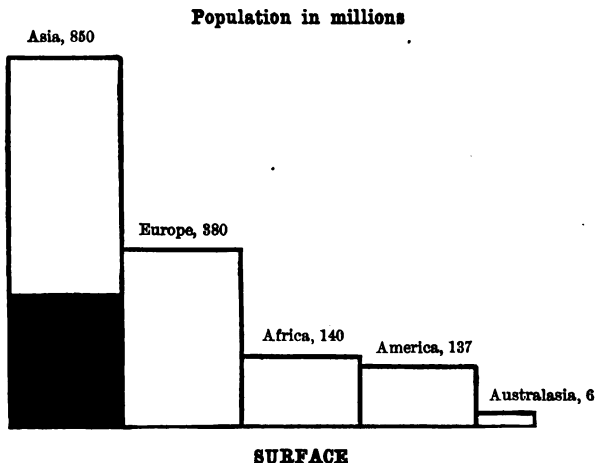
ASIA

BOUNDARIES: North: Arctic Ocean. East: Pacific Ocean. South: Indian Ocean. West: Red Sea, Mediterranean Sea, Sea of Marmora, Black Sea, Caucasus Mountains, Caspian Sea, Ural River and Ural Mountains.

SIZE and POPULATION: About 6,700 miles long and 5,400 miles broad. **Area:** over 17,000,000 square miles. **Population:** nearly 850,000,000.

The following diagrams show the comparative sizes and population of the continents. The black portions show the proportions of the area and population of Asia under British rule.





The greater part of Asia is more than 1,000 feet above the sea-level, while a considerable portion is above 10,000 feet. (*Note this in Physical Map on p. 229.*)

LOWLANDS : The Great Northern Plain, the Plain of Northern India, the Plain of China, and the Plain of Mesopotamia.

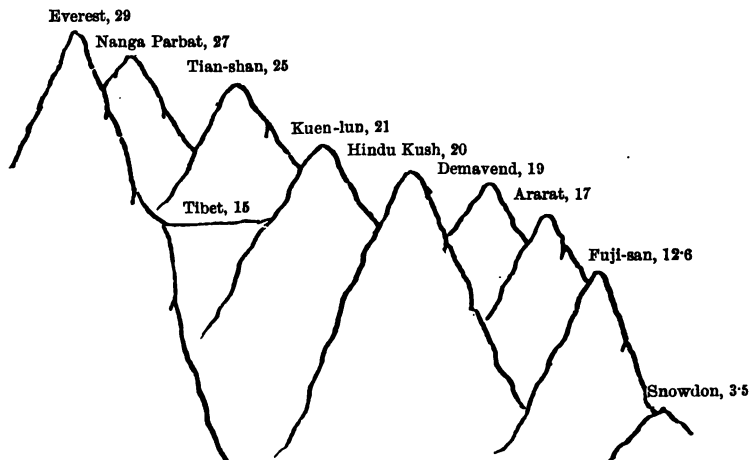
HIGHLANDS : The main ranges diverge from the Pamir Plateau.

1. Branching to the east are the **Himalayas** and the **Kuen-lun**, enclosing the lofty **Tibetan Plateau** 15,000 feet in elevation. The highest peaks in the Himalayas are **Everest** 29,000 feet, **Godwin-Austen** and **Kanchanjanga** each over 28,000 feet, and **Nanga Parbat** 27,000 feet.
2. Towards the north-east : the **Tian-shan** 25,000 feet, and its continuations the **Altai**, **Yablonoi**, and **Stanovoi Mountains**. South of this lies the **Mongolian Plateau** with the great desert of **Gobi**.
3. Westwards runs another long range : the **Hindu Kush** 20,000 feet, with its continuations, the **Elburz Mountains** with **Demavend** 19,000 feet, the **Armenian Mountains** with **Ararat**, the **Taurus Mountains**, and the **Mountains of Lebanon**.

South of the **Elburz Mountains** lies the **Iranian Plateau**, and on either side of the **Taurus** the **Plateaus of Asia Minor** and **Arabia**.

4. Towards the south are the **Sulaiman Mountains**. Filling up the southern part of India is the Plateau of the **Deccan**, held up by the **Vindhya Mountains** and the **Western and Eastern Ghats**.



Comparative Heights of Mountains in thousands of feet above sea-level

DESERTS : The Desert of Gobi or Shamo, the Indian Desert, the Great Salt Desert of Persia, the Arabian Deserts, the Deserts of Turkistan, and the Tundra.

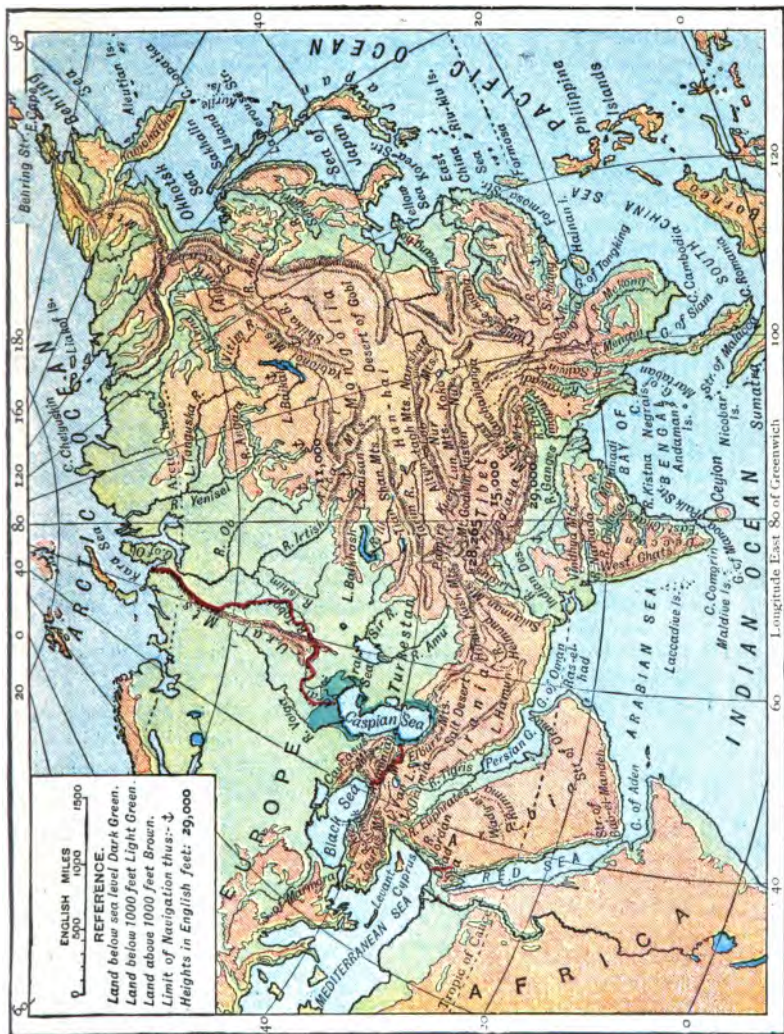
THE COAST LINE

North : low and icebound. Chief features, the Kara Sea, Gulf of Ob, Cape Chelyuskin, the most northerly point in Asia, the Lena Delta, the Liakof Islands.

East : five large seas separated from the Pacific by large groups of islands, most of which are volcanic : Behring Strait with East Cape ; Behring Sea and the Aleutian Islands ; the Sea of Okhotsk and the Kuriles ; the Sea of Japan, Sakhalin and the Japan Islands ; the Yellow Sea and the Riu-kiu Islands (Lu-chu) ; the China Sea, containing the Gulfs of Tongking and Siam, and the large island of Hainan, and which is bordered by Formosa, the Philippines, Borneo, Celebes, Java, Sumatra, and many smaller islands.

The principal channels are the Korea Strait and the Channel of Formosa.

South : Cape Romania and the Strait of Malacca, the Bay of Bengal with the Gulf of Martaban, the Andaman and Nicobar Islands, Ceylon, and Palk Strait ; Cape Comorin, the Maldivé and Laccadive Islands, the Arabian Sea with its two prolongations, the Persian Gulf and the Red Sea. The entrance to the Gulf is by the Strait of Ormuz,



and to the Red Sea by the Gulf of Aden and the Strait of Bab-el-Mandeb.

West : the Levant, Cyprus, Rhodes, Cape Baba the most westerly point, Sea of Marmora, and Black Sea.

CLIMATE

1. **Northern Zone :** Extreme cold, about nine months winter.
2. **Central Zone :** Extreme dryness, combined with great variation between winter and summer, and between midday and midnight.
3. **Southern Zone :** Great heat and plenty of moisture. On the Western Ghats the annual rainfall is 260 inches ; on the Khasi Hills as much as 600 inches.

RIVERS AND LAKES

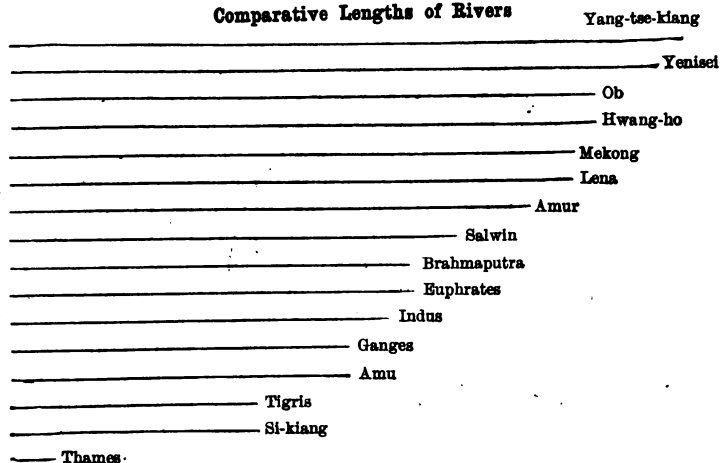
1. **SIBERIAN :** Frozen for greater part of the year, hence of little use for navigation.
Ob (2,600 miles long), with its tributaries Irtysh and Tobol, rises in Altai Mountains. Principal towns : Tomsk, Omsk, and Tobolsk.
Yenisei (2,900), joined by Angara or Upper Tunguska from Lake Baikal and Lower Tunguska. Principal town : Irkutsk.
Lena (2,500), with its tributary the Aldan ; rises near Lake Baikal and enters the Arctic Ocean by an extensive delta. Yakutsk is the chief town.
Amur (2,300) receives two great tributaries, the Argun and the Sungari. It is free from ice for half the year.
2. **CHINESE :** Hwang-ho (2,600), rapid and subject to floods. Singan is the largest town.
Yang-tse-kiang (3,000) flows through a rich country. Many great cities on its banks, of which Shanghai, Nanking, Hankau, Chungking, and Chengtu are among the most important.
Si-kiang (1,100) drains Southern China. Canton, Hong-kong, and Macao at its mouth.
3. **INDO-CHINESE :** Mekong (2,500) and Menam. The chief towns are Saigon on the Mekong, and Bangkok on the Menam.
Salwin (2,000), Irawadi (1,100), with Mandalay and Rangoon on its banks.
4. **INDIAN :** Brahmaputra (1,800), known as Sanpo in Tibet. Dacca is the chief town.
Ganges (1,500), chief river of India ; joined by the Jumna, Chambal, Son, and Gogra ; many large towns in its basin, of which Delhi, Agra, Cawnpur, Lucknow, Benares, Patna, and Calcutta are among the most important.

Indus (1,700) receives the **Sutlej**, **Ravi**, **Chenab**, **Jehlam**. Lower course lies through a very dry district. Chief towns: **Srinagar**, **Kabul**, **Peshawar**, **Lahore**, and **Karachi**.

The **Mahanadi**, **Godavari**, **Kistna**, and **Cauvery** flow from the Deccan into the Bay of Bengal; the **Tapti** and **Narbada** into the Gulf of Cambay.

5. The **Euphrates** (1,800) and the **Tigris** (1,100) unite and flow into the Persian Gulf. **Bagdad** and **Basra** are the chief trading towns on their banks.

Comparative Lengths of Rivers



6. **RIVERS DRAINING INLAND** : the **Amu** (1,500) and the **Sir** flow into the **Aral Sea**. **Samarkand** and **Bokhara** are the largest towns on the former, and **Khokand** and **Tashkent** on the latter.

The **Tarim** loses itself in **Lob-Nur**.

The **Ural** enters the **Caspian** on the north, and the **Kur** flows in towards the south. **Tiflis** is the largest town on the **Kur**.

The **Helmand** drains the southern part of **Afghanistan**, and flows into the **Sistan** swamp.

The **Ili** flows from the **Tian-shan** into **L. Balkash**.

LAKES: Fresh-water lake: **Lake Baikal** (14,000 sq. m.). Salt lakes: **Caspian Sea** (170,000 sq. m.), **Sea of Aral** (26,000 sq. m.), **Lake Balkash** in the south-west of Asiatic Russia: **Lob-Nur**, **Koko-Nur** and **Tengri-Nur** on the **Tibetan Plateau**, and **Van** and **Urumia** on the **Armenian Plateau**.



PRODUCTS (*see Map*)

- I. **VEGETABLE**: 1. **Northern Zone**: Scanty on the whole. Forests of larch, pine, birch, willow, poplar, &c.; berry-bearing shrubs, mosses, and lichens; wheat and other cereals on the fertile black earth lands.
2. **Central Zone**: Few trees; grasses and aromatic plants are the chief vegetation of the dry uplands. Where there is a good water-supply, excellent fruits abundant: peaches, apricots, plums, cherries, grapes, dates, figs, and melons.
3. **Southern Zone**: Great variety of trees, food plants, and plants supplying industrial products: timber trees such as teak; ornamental woods such as ebony and sandal wood; palms, tropical fruits, rice, millet, wheat and other grains; the sugar cane, the tea plant, the coffee plant, spices, oilseeds; the mulberry tree, the cotton plant, jute; indigo, opium, cinchona, and many other useful products.
- II. **ANIMAL**: 1. **Northern Zone**: Fur-bearing animals such as the sable, ermine, fox, and squirrel; bears, wolves, reindeer, and dogs, enormous numbers of wildfowl and fish.
2. **Central Zone**: Vast quantities of ruminants, both wild and tame; sheep, goats, camels, horses, asses, yaks, and deer.
3. **Southern Zone**: Herbivorous animals such as the elephant, rhinoceros, bison, buffalo, and deer: carnivorous animals such as the tiger, leopard, hyena, wolf, jackal; monkeys, snakes; insects such as the locust, lac, silk-moth, destructive white ants, &c.; great numbers of birds, parrots, pheasants, eagles, vultures, crows, &c.
- III. **MINERAL**: Coal, petroleum, iron, gold, silver, copper, lead, tin, salt, and precious stones.

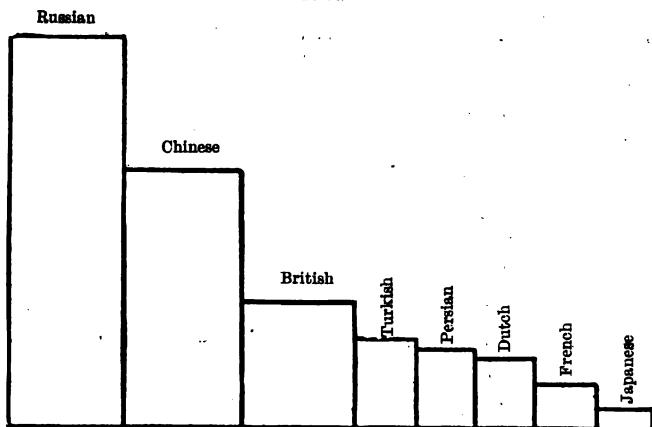
INHABITANTS

- Two races, the white and the yellow—the white race living chiefly in the south-west, and the yellow in the north, east, and south-east.
- The White Race**: 1. **Aryans**: chiefly in Northern India and Irania.
2. **Semitic**: Jews, Syrians, and Arabs.
- The Yellow Race**: 1. **Chinese**: China, Japan, Indo-China, and Tibet.
2. **Mongol-Tatar**: scattered all over the central and northern regions from the Urals to the Pacific.

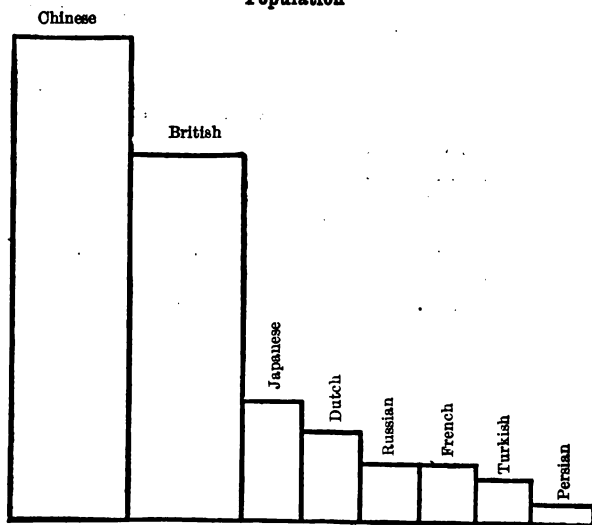
COUNTRIES OF ASIA

The following diagrams show the relative area and population of the eight most important States in Asia:

Area



Population



- Russian Dominions:** 6,600,000 square miles, 23,000,000 inhabitants. **Siberia:** capitals, Omsk and Irkutsk. **Russian Central Asia:** capital, Tashkent. **Caucasia:** capital, Tiflis.
- Chinese Dominions:** 4,218,000 square miles, 400,000,000 inhabitants (estimate). **China Proper:** capital, Peking. **Manchuria:** capital, Mukden. **Tibet:** capital, Lhasa. **Mongolia:** capital, Urga.
- British Dominions:** 1,951,000 square miles, 296,000,000 inhabitants. **India:** capital, Calcutta. **Burma:** capitals, Rangoon, Mandalay. **Straits Settlements:** capital, Singapore. **Cyprus:** capital, Nicosia.
- Turkish Dominions:** 654,000 square miles, 16,000,000 inhabitants (estimate). **Asia Minor:** capital, Smyrna. **Syria and Palestine:** capital, Damascus. **Mesopotamia:** capital, Bagdad. **Turkish Arabia:** capitals, Mecca and Medina.
- Persia:** 628,000 square miles, 9,000,000 inhabitants (estimate): capital, Teheran.
- Dutch Dominions:** 584,000 square miles, 34,000,000 inhabitants (estimate): capital, Batavia.
- French Dominions:** 363,000 square miles, 23,000,000 inhabitants (estimate): capital, Saigon.
- Japan:** 160,000 square miles, 47,000,000 inhabitants: capital, Tokio.
- Siam:** 200,000 square miles, 8,000,000 inhabitants (estimate): capital, Bangkok.
- Afghanistan:** 215,000 square miles, 4,000,000 inhabitants (estimate): capital, Kabul.
- Korea:** 82,000 square miles, 16,000,000 inhabitants (estimate): capital, Seoul.
- Arabia:** total area about 1,000,000 square miles; total population estimated at six or seven millions.
- Philippines,** belonging to United States: 115,000 square miles, 7,000,000 inhabitants (estimate): capital, Manila.

BRITISH DOMINIONS

The Indian Empire, including Burma; Ceylon, the Straits Settlements with the protected Malay States, British North Borneo and Sarawak, Hong-kong and Wei-hai-wei, Aden and Perim.

THE INDIAN EMPIRE

SITUATION and SIZE: The Indian Empire includes the country from the Himalayas to Cape Comorin (about 1,950 miles), and from



the frontiers of Persia and Afghanistan to the borders of China and Siam (over 2,000 miles); a total area of upwards of 1,700,000 square miles.

RELIEF: Three great divisions. 1. The **Northern Mountain System:** Himalayas with Everest, 29,000; Kanchanjanga, 28,000; Godwin-Austen, 28,000; Nanga Parbat, 27,000.

Sulaiman Mountains: Khaibar Pass to Kabul, Gumal Pass to Ghazni and Kandahar, Bolan Pass to Quetta and Kandahar.

Arakan Yoma and other ranges on the east.

2. The **Great Plain**, lying between the Himalayas and the Southern Highlands, and including the Great Indian Desert.

3. The **Deccan** with the **Satpura**, **Vindhya**, and **Aravali** Mountains to the north; the **Western** and **Eastern Ghats** on either side; and the **Nilgiris** (8,500) to the south. South of the Nilgiris lies the **Palghat Gap**, which affords communication between the Coromandel and Malabar coasts. South of the gap the land again rises.

COAST: Sandy on the whole, with few good harbours. The chief features are **Karachi**, **Gulf of Cutch**, **Gulf of Cambay**, **Bombay**, **Goa** (a Portuguese possession), **Calicut**, **Cape Comorin**, **Gulf of Manasar**, **Palk Strait**, **Ceylon**, **Madras**, **Ganges Delta**, **Cape Negrais**, **Irawadi Delta**, **Gulf of Martaban**, **Andaman** and **Nicobar Islands**.

RIVERS: *Make out a table from the Map on p. 239 under the following heads:* River, Length, Tributaries, Towns on banks.

VEGETABLE PRODUCTIONS: 1. **Agricultural:** The most important are: **Millet**, **rice**, **wheat**, **pulse**, **oilseeds**, **sugar-cane**, **cocoanuts**; **tea**, **coffee**, **cinchona**, **opium**, **tobacco**, **pepper**; **indigo**, **cotton**, **jute**, and **silk**. 2. **Forest products:** **Bamboo**, **canes**, **rubber**, **conifers**, **teak**, **cedars**, **satin**, **ebony**, and **sandal woods**, **palms**.

ANIMAL PRODUCTIONS: 1. **Wild:** **Elephant**, **rhinoceros**, **bison**, **buffalo**, **ass**, **antelopes**, and **deer**; **tiger**, **leopard**, and **lion**; **wolf**, **hyena**, **jackal**, and **dog**; **bear** and **hog**; **monkeys**; **snakes**, **crocodiles**; **locusts** and **ants**; **bee**, **silk-moth**, and **lac-insect**; **vulture**, **eagle**, **peacock**, **pheasant**, **partridges**, and **jungle fowl** (akin to our domestic fowls).

2. **Domestic:** **Elephant**, **ox**, **buffalo**; **camel** in the north-west; **yak**, **goats**, and **sheep** in the mountains.

MINERAL PRODUCTIONS: **Coal**, **iron**, **gold**, **copper**, **salt**, **oil**, **precious stones**.



Walker & Cockerell & Co.

INDUSTRIES : Agriculture is the chief occupation.

Manufactures : Cotton at Bombay ; shawls in Kashmir and the Punjab ; Silks at Murshidabad, Benares, Ahmadabad ; jute in Bengal ; carpets and rugs ; metal wares are wrought with considerable skill.

RAILWAYS, of which there are about 23,000 miles, now connect all the chief towns, as may be seen on the Map.

Exercise : Trace the chief lines on the Map on p. 241 and make a list of the towns they connect.



TRADE: 1. **Ports:** **Bombay (771):** chief port and manufacturing city in India, acquired 1661. 6,300 miles from London.

N.B.—Populations are given in thousands.

Calcutta (over 1,150 with Howrah): modern city, capital; navigation of Hooghli difficult owing to sandbanks. 8,000 miles from London.

Karachi (115): nearest port; exports wheat from Indus valley. 6,100 miles from London.

Madras (509): extensive trade, artificial harbour.

Rangoon (232): nearly all the trade of Burma passes through this port.

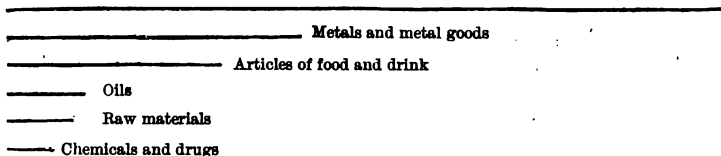
2. **Imports:** **Manufactured cotton, metals, hardware and cutlery, sugar, oils, machinery, railway plant, silk, liquors, provisions, woollen goods, apparel, chemicals and drugs, and many smaller articles.**

By far the greatest part of the imports come from the British Isles.

The following lines show the relative value of the most important imports:

Comparative Value of Chief Imports

Yarns and textile fabrics

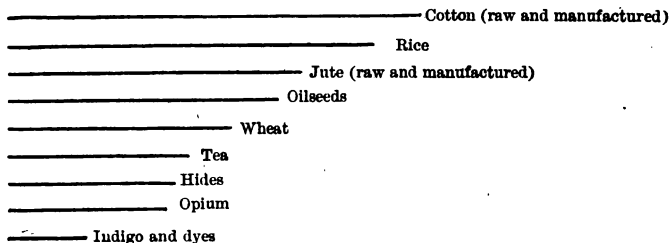


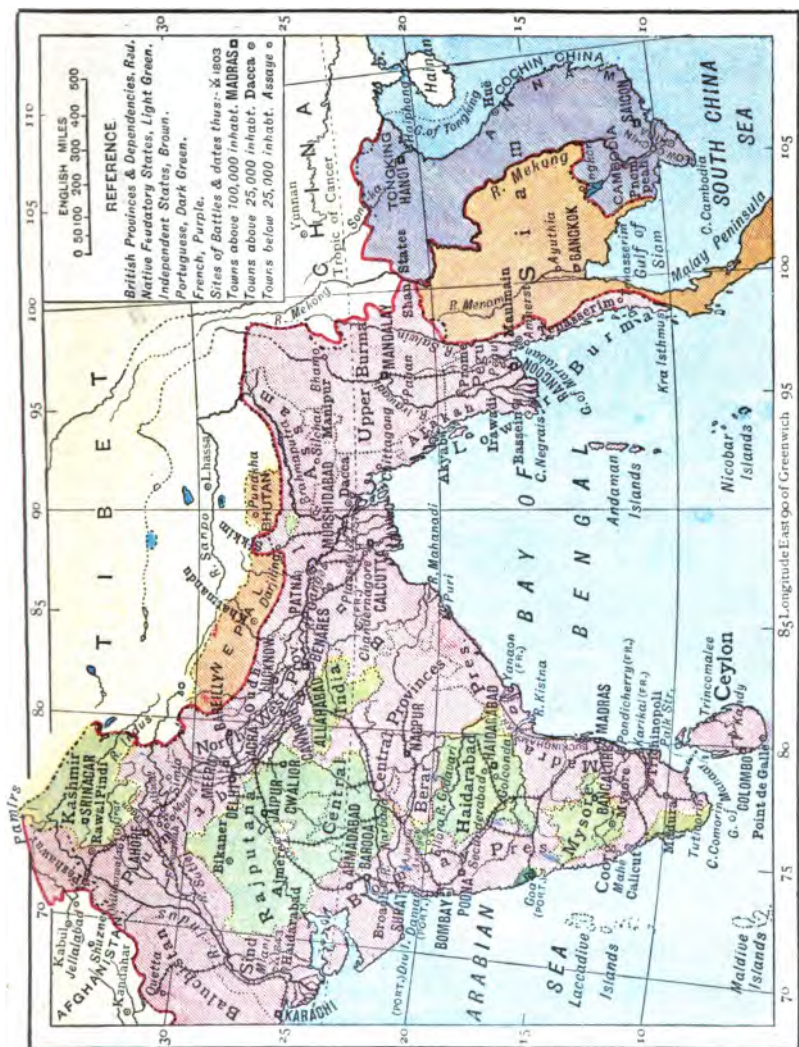
3. **Exports:** **Raw and manufactured cotton, rice, jute, oilseeds, wheat, tea, hides, opium, indigo, also coffee, wool, wood, lac, spices, oils, silk, &c.**

The exports go chiefly to the British Isles, China, Germany, France, Egypt.

The following lines show the relative value of the most important exports (same scale as imports):

Comparative Value of Chief Exports





DIVISIONS: 1. **British Territory**, ruled over by Viceroy assisted by a Council, with Governors, Lieutenant-Governors, and Chief Commissioners over the various provinces. 2. **Native Feudatory States**. 3. **Independent States**.

Chief British Provinces

Name.	Date of acquisition.	Area in square miles.	Population.	Chief towns.
Bengal.	1696-1818	159,000	71,800,000	Calcutta (1,000), Patna (135)
Berar	—	17,000	3,000,000	Ellichpur
Madras	1639-1800	151,000	42,000,000	Madras (509)
North-West Provinces	1801-1803	83,000	47,500,000	{ Allahabad (175), Benares (220), Cawnpur (197), Agra (188), Bareilly (117), Meerut (120).
Punjab	1849	113,000	22,449,000	Lahore (120), Delhi (208)
North-West Frontier Province	—	—	—	Peshawar (84)
Bombay	1661-1818	186,000	25,000,000	{ Bombay (771), Poona (111), Ahmadabad (148), Surat (118)
Oudh	1856	24,000	22,500,000	Lucknow (264)
Coorg	—	1,580	180,000	Merkara
Central Provinces	1817-1826	115,000	13,000,000	Nagpur (125)
Assam	1826	49,000	6,000,000	Shillong
Lower Burma	1826-1875	234,000	9,250,000	{ Rangoon (232)
Upper Burma	1885	—	—	{ Mandalay (182)
The Islands (Andamans, &c.)	—	2,500	40,000	—
British Baluchistan	—	—	145,000	—
Sind	1843	47,000	3,212,000	Haidarabad, Karachi (105)

Native Feudatory States (about 650 in all)

Name.	Area in square miles.	Population.	Chief towns.
Haidarabad	82,000	11,000,000	Haidarabad (446)
Rajputana States	128,000	10,000,000	Jaipur (159)
Central India States	78,000	8,500,000	Gwalior (104)
Bombay States	69,000	6,891,000	Baroda (116)
Mysore	28,000	5,500,000	Bangalore (159)
Punjab States	38,000	4,438,000	—
Madras States	9,000	4,190,000	—
Bengal States	50,000	3,300,000	—
Kashmir	80,000	3,000,000	Srinagar (122)
Baluchistan	130,000	—	—
Independent States.			
Nepal	54,000	2,000,000	Khatmandu
Bhutan	16,000	50,000	Punakha

NEPAL

An independent State in the Himalayas, peopled by the warlike Gurkhas.

It is 550 miles long and 160 miles broad.

The chief products are cattle, hides, rice, oilseeds, gums, resins, butter, timber, and musk.

Khatmandu (50) is the capital.

BHUTAN

An independent State about 160 miles long, producing rice, corn, millet, musk, and cloth.

CEYLON

AREA : 25,000 square miles.

POPULATION : three and a half millions ; Sinhalese and Tamils.

PHYSICAL FEATURES : Low in the north ; mountainous in the south.

Pedrotallagalla, 8,300 feet, and Adam's Peak, 7,400 feet, are the chief peaks.

PRODUCTS : Rice, tea, cocoanuts, cinnamon, cocoa, areca nuts, cinchona, plumbago, pearls.

TOWNS : Colombo (127), the capital, chief seaport, vessels calling here on their way to the East. Kandy is the chief town in the interior.

Trincomealee good harbour, headquarters for the East Indian fleet.

THE STRAITS SETTLEMENTS

These are Singapore, Penang with Wellesley Province, Malacca with the protected Malay States.

The total area is 40,000 square miles, chiefly peopled by Malays, Chinese, and Hindus.

PRODUCTS : Tin, spices, gums, rubber, gambier (an extract from leaves of a shrub, used for dyeing and tanning), rattans, copra, sago, hides, rice, sugar ; elephants, buffaloes, tigers.

TOWNS : Singapore (185), great commercial centre.

BRITISH BORNEO

AREA about 100,000 square miles. Consists of Sarawak, Brunei, British North Borneo, and Labuan.

PRODUCTS : Sago, rubber, tobacco, coal, edible birds' nests, rice.

Labuan is a coaling station.

HONG-KONG

A small island which, with Kaulung, a small part of the mainland, belongs to England. Military and naval station. The busy port of Victoria (190) is the capital.

WEI-HAI-WEI

A harbour in Shantung leased from China, facing the Russian station of Port Arthur.

RUSSIAN DOMINIONS**I. SIBERIA**

SIZE and POPULATION : About 5,000,000 square miles, with 6,000,000 inhabitants.

Draw a Map and indicate the physical features. Show also the products. The chief imports are manufactured goods from Europe, and tea from China.

The chief exports are furs and minerals.

The Trans-Siberian Railway passes from Samara in European Russia, over the Urals to Chelyabinsk, joins a branch from Perm, Ekaterinburg (55), and Tiumen, and runs through Omsk (55), Krasnoyarsk (26), Irkutsk (52), Kirin, and by Mukden (250), to Port Arthur or to Vladivostok.

Other towns are : Tomsk (53), Tobolsk, the old capital ; Barnaul, the chief town in the Altai mining district ; Yakutsk on the Lena.

II. RUSSIAN CENTRAL ASIA

AREA (including Bokhara and Khiva) : About 1,600,000 square miles.

POPULATION : About 8,000,000.

PRODUCTS : Fruit, cereals ; cotton, wool, silk ; horses, cattle, sheep, and camels.

The chief exports are cotton, silk, and tobacco.

The chief towns are on the railway : Krasnovodsk, Merv, Bokhara (75), the capital of the Khanate ; Samarkand (55), Khokand (82), Tashkent (157).

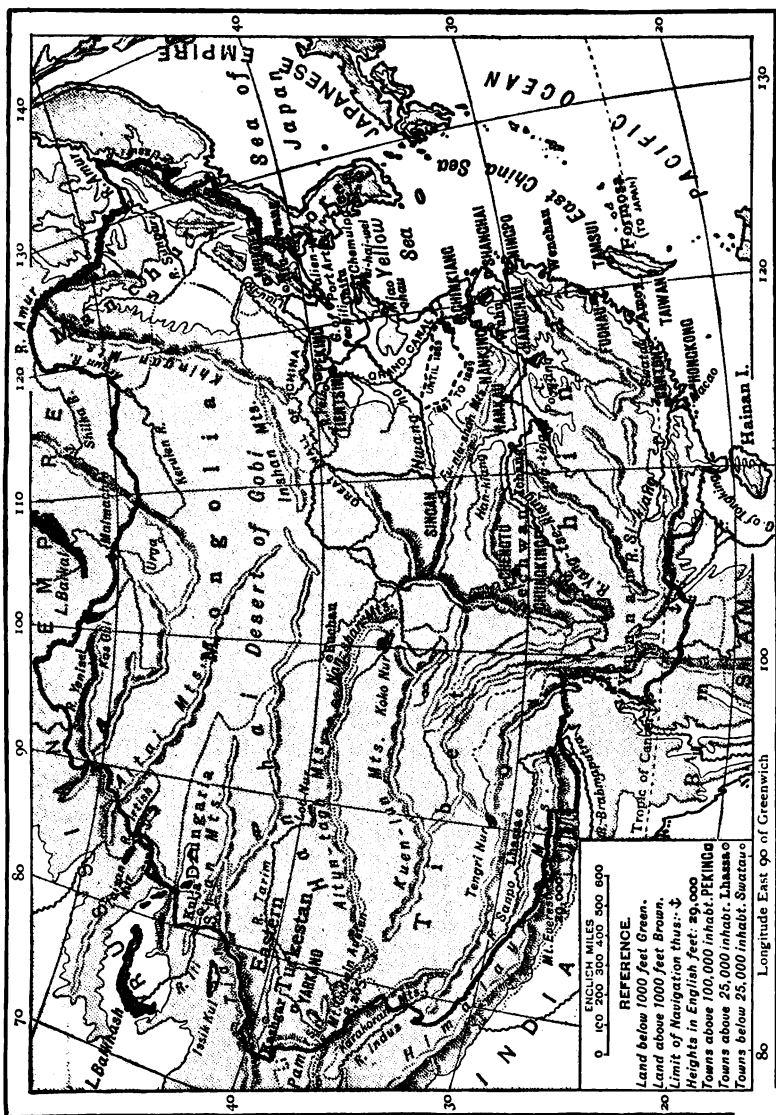
III. CAUCASIA

AREA : 180,000 square miles. **Population :** About 10,000,000.

PHYSICAL FEATURES : Caucasus Mountains with Elburz, 18,500 feet, and the Darial Gorge traversed by the main road between the northern and southern sides of the mountains.

The river Kur with its tributary, the Aras.

The chief products are corn, fruits, and minerals ; petroleum from Baku is the most important export.



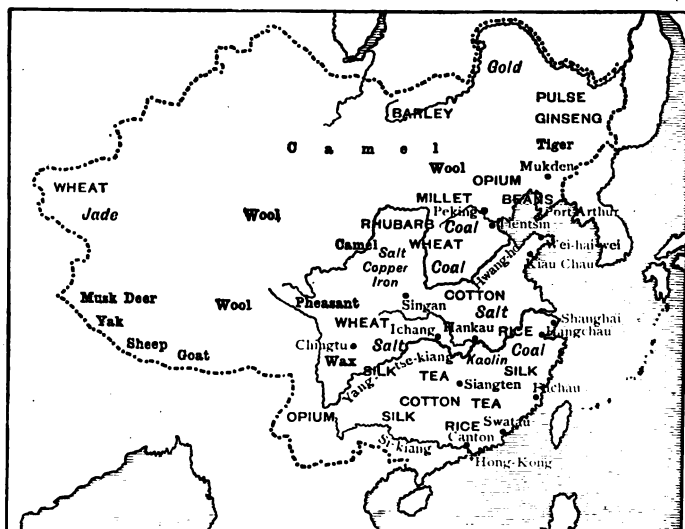
Batum is the chief Black Sea port, and Tifis (160) is the capital. The Trans-Caucasian railway may be regarded as part of the Trans-Caspian line. It runs from Batum to Baku.

THE CHINESE EMPIRE

AREA and POPULATION: There are no reliable statistics as to the population of China. The following are the chief divisions:

China Proper	. . .	1,336,000 square miles,	380,000,000 inhabitants.
Manchuria	. . .	362,000	" 8,000,000 "
Mongolia	. . .	1,288,000	" 2,000,000 "
Tibet	. . .	651,000	" 6,000,000 "
Eastern Turkistan	. . .	430,000	" 600,000 "
Dzungaria	. . .	150,000	" 600,000 "

Draw a Map and insert the mountains and rivers of China.



Walker & Cockerell sc.

PRODUCTS: 1. Vegetable: Rice, wheat, millet, maize, barley; mulberry, cotton; tea, sugar; opium, medicinal rhubarb in Hwangho basin, ginseng in Manchuria.

2. **Animal**: Few in China Proper; sheep, goat, yak, musk deer, antelope, camel, horse in Tibet and Mongolia.
3. **Mineral**: China is extremely rich in mineral wealth, though but little worked. Immense coal fields, iron, copper, salt, and clay.

TRADE: Great coasting and inland trade between the various parts of the empire. The foreign trade is chiefly carried on at a number of treaty ports, of which the most important are Shanghai (586), Canton (2,500), Tientsin (1,000), Swatau (35), Amoy (96), Fuchau (650), Niuchwang (60).

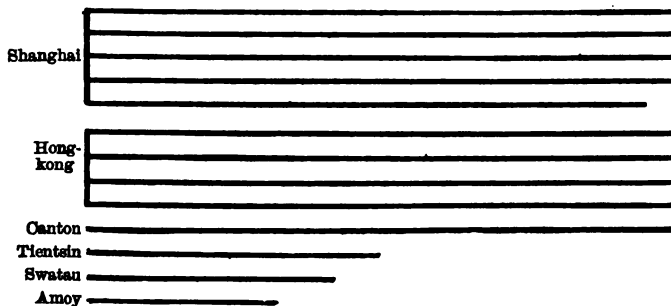
N.B. Populations are given in thousands.

The chief imports are cotton goods, opium, oil, and metals.

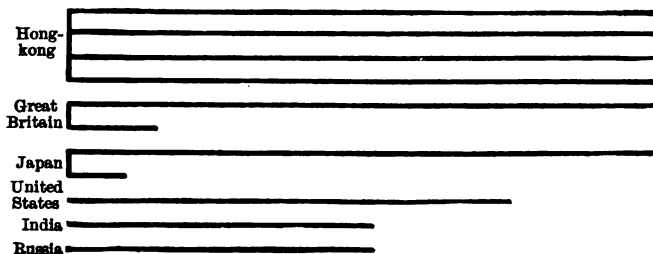
The chief exports are silk and tea.

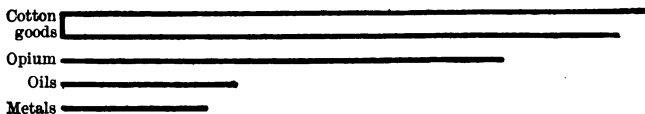
The following diagrams illustrate the foreign trade of China. They are all drawn to the same scale; each full line equals 40.

Relative Amount of Foreign Trade at Chief Ports



Relative Amount of Trade with Foreign Countries



Relative Value of Chief Imports**Relative Value of Chief Exports****TOWNS** (the populations are estimates):

1. **On the coast:** **Canton** (2,500), on the Si-kiang; **Amoy** (96), great tea port; **Fuchau** (650) exports tea and silk; **Ningpo** (255); **Hang-chau** (700), starting point of Imperial Canal; **Suchau** (500), on the canal; **Shanghai** (586), chief port in China; **Niuchwang** (60), on Gulf of Pechili.
2. **In Yang-tse-kiang basin:** **Nanking** (130), old capital of China; **Hankau** (800), great tea port; **Iohang**, limit of steam navigation on river; **Chungking** (300), great river port; **Chengtu** (600), capital of Szechwan.
3. **Peking** (1,000); **Tientsin** (1,000), port for Northern China; **Singan** (1,000), on tributary of Hwang-ho; **Kalgan** (200), great trading centre, where road to Siberia passes through the Great Wall.
4. **Lhasa**, capital of Tibet.
Urga, capital of Mongolia.
Yarkand and **Kashgar** in Chinese Turkistan.
Mukden (250), capital of Manchuria.

KOREA

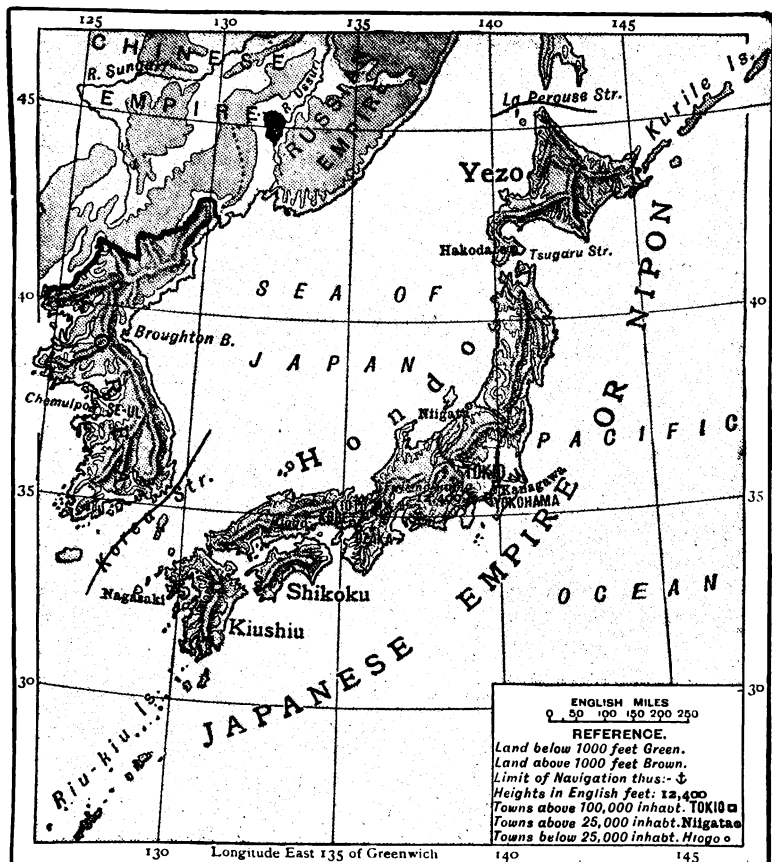
Chief towns: **Soul** (250), the capital; **Chemulpo**, the chief port.

Chief exports: Rice, beans, hides, and ginseng. The chief import is manufactured cotton.

JAPAN

AREA and POPULATION: About 4,000 islands, extending from Kamchatka to the Philippines, a distance of 2,000 miles. The empire consists of **Hondo**, 87,000 square miles; **Yezo**, 36,000 square miles;

JAPAN



Walker & Bontall sc.

Longmans & Co. London & New York.

Kinshiu, 17,000 square miles; **Shikoku**, 7,000 square miles; **Formosa**, 13,500 square miles; together with the Kurile Islands and the Riu-kiu Islands.

STRAITS: **La Perouse Strait**, between Sakhalin and Yezo; **Tsugaru Strait**, between Yezo and Hondo; **Korea Strait**, between Korea and Japan; **Formosa Strait**, between Formosa and China.

PRODUCTS: 1. **Vegetable**: **Mulberry**, bamboo, camphor-tree, lacquer-tree, vegetable wax tree, chrysanthemum, the national flower; rice, wheat, barley, rye, and potatoes; tea, sugar, and tobacco.

2. **Mineral**: Sulphur, coal in Kinshiu and Yezo, copper, iron, silver, and kaolin (for porcelain), are the most important.

INDUSTRIES: Agriculture is the chief. The Japanese are skilful artisans, and manufacture cotton and silk goods, lacquer and bamboo ware, matches, porcelain, and bronze ware. No less than two and a half million people are engaged in the fisheries.

TRADE: 1. **Ports**: **Yokohama** (193), port of Tokio; **Kobé** (216), port of Kyoto; **Osaka** (821), on south coast of Hondo; **Nagasaki** (107), the port of Kinshiu; **Hakodate** (78), the port of Yezo; **Niigata** (53), on the west of Hondo.

2. **Imports**: Raw cotton and cotton goods, rice, sugar, metals and machinery, woollen goods, oil, flour, and pulse are the chief.

3. **Exports**: Raw and manufactured silk, cotton yarns, coal, green tea, copper, and matches are the most important.

The capital is **Tokio** (1,500), which is now connected by rail with most of the large towns in Hondo. The old capital was **Kyoto** (353), still the centre for art and learning.

TURKISH DOMINIONS

The dominions of the Sultan in Asia include: **Asia Minor**, 197,000 square miles; **Armenia and Kurdistan**, 72,000 square miles; **Mesopotamia**, 100,000 square miles; **Syria**, 109,000 square miles; and **Turkish Arabia**, 174,000 square miles.

MOUNTAINS: **Armenian** with **Ararat**, 17,000 feet; **Taurus**, 13,000 feet; **Lebanon** and **Anti-Lebanon**, 10,000 feet.

COAST: Chief features: **Cape Baba**, **Gulf of Smyrna**, the islands of **Rhodes**, **Samos**, **Khios**, and **Mitylene**.

RIVERS: **Euphrates**, **Tigris**, and **Kizil Irmak**.

PRODUCTS: 1. Vegetable: Wine, olives, figs, raisins, oranges, dates, wheat, barley; cotton, silk; opium, dyes, tobacco.

2. Animal: Sheep, goats, camels, buffaloes.

TRADE: 1. Ports: Smyrna (200), chief port in Asia Minor; Beirut (120), chief port in Syria; Trebizond, chief port of Armenia; Basra, chief port of Mesopotamia; Jaffa, port for Jerusalem; and Jedda, the port for Mecca.

ASIATIC TURKEY



Longmans & Co. London & New York.

2. Imports: Coal, sugar; linen, woollen, and cotton goods; flour, rice, coffee, and manufactured goods.

3. Exports: Fruit (raisins, figs, oranges), wool and goat's hair, raw silk, opium, valonia, cotton, oils, barley, carpets.

TOWNS: 1. Asia Minor: Soutari, connected with Angora by rail; Brussa (76), the centre of a silk producing district; Adana, Kaisarieh (72).

2. **Armenia** : Erzerum (60) and Diarbekir.
3. **Mesopotamia** : Bagdad (145) and Mosul.
4. **Syria** : Damascus (150); Aleppo (127), great trade centre for caravans from Mesopotamia; Jerusalem.
5. **Turkish Arabia** : Mecca (60) and Medina.

ARABIA

The total area is about one million square miles.

In Nejd are two native States, **Jebel Shammar** with the town of **Hayil**, and the **Wahhabi State**.

IRANIA



Longmans & Co. London & New York.

The coast State of **Oman** has a population of 1,500,000. The Sultan resides at **Maskat**, a place of considerable trade.

The rest of the peninsula forms part of the Turkish Empire.

IRANIA

This includes **Persia**, **Afghanistan**, and **Baluchistan**.

RELIEF: From the Pamir westwards the **Hindu Kush**, with its continuations, join the **Elburz Mountains** with **Demavend**, 19,000 feet. From the **Armenian Plateau** a number of parallel ranges run in a south-easterly direction along the southern side of the plateau; the highest point is **Kuh-Dinar**, 17,000 feet.

Sandy wastes and salt swamps on the plateau, of which the **Great Salt Desert of Khorassan** is the largest.

RIVERS: **Helmand** and **Murghab** in **Afghanistan**; **Karun** draining into the **Persian Gulf**.

LAKES: **Urumia**, **Sistan** swamp.

PRODUCTS: **Dates**, **fruits** (peach, cherry, &c.), **grapes**, **figs**, **sugar**, and **rice**; **cotton** and **silk**; **opium** and **tobacco**; **madder** and **indigo**.

Horses, **camels**, and **mules** are chief beasts of burden. **Goats** and **sheep** supply hair and wool.

TRADE: 1. **Ports**: **Bushire** and **Bender Abbas** on the **Gulf**; **Resht** and **Balfrush** on the **Caspian**.

2. The caravan trade is considerable; the chief route is from **Asiatic Turkey** to **Tabriz** (180), the greatest trading centre in **Persia**, through **Teheran** (210), **Meshed** (60), **Herat**, thence by **Kabul** to **Peshawar** in **India**; or from **Herat** to **Kandahar** and **Sukkur** on the **Indus**. From **Teheran** another important route leads to **Ispahan** (80), **Yezd**, and **Shiraz**.

The chief imports into **Persia** are **cotton** and **woollen goods**, **sugar**, **tea**, **coffee**.

Into **Afghanistan**: **cotton goods**, **tea**, **sugar**, and **indigo**.

The chief exports from **Persia** are **dried fruits**, **opium**, **cotton**, **wool**, **silk**, **carpets**, **pearls**.

From **Afghanistan**: **horses**, **fruits**.

DUTCH DOMINIONS

The Dutch possess the Great Sunda Islands of **Sumatra** and **Java**, **Celebes**, the greater part of **Borneo**, the **Moluccas**, part of **Timor**.

PRODUCTS: 1. **Vegetable**: Most important: **rice**, **sugar**, **coffee**, **tea**, **cinchona**, **spices**, **pepper**, **camphor**, **tobacco**, **indigo**, **gutta-percha**, **bananas**, **cocoanuts**, &c.

Dutch Borneo : over 200,000 square miles, with a population of perhaps a million.

Celebes, 72,000 square miles, produces coffee, cocoa, and sago. **Macassar** is the chief port.

The Moluccas, 42,000 square miles, produce cloves, nutmegs, and cinnamon.

THE PHILIPPINES

These islands have an area of 115,000 square miles, and a population estimated at 8,000,000. The chief islands are **Luzon** and **Mindanao**. They have belonged to the United States since 1898.

PRODUCTS : Hemp, sugar, coffee, copra, tobacco, and indigo.

The chief exports are hemp, sugar, tobacco, and cigars.

Manilla (154) is the capital.

FRENCH DOMINIONS

The French possessions in Asia consist of :—

Cochin-China	23,000 sq. miles,	2,000,000 inhab.
Tongking and Laos	210,000	13,500,000
Annam (protected State)	88,000	5,000,000
Cambodia (protected State)	40,000	1,500,000
A few towns in India	200	280,000

PRODUCTS : 1. **Vegetable** : Timber, rice, maize, sugar, coffee, areca nuts, tobacco, cinnamon, pepper, cotton, and silk.

2. **Mineral** : Gold, iron, coal, zinc, copper.

COCHIN-CHINA : **Saigon** (80) is the capital and chief port. **Imports** : Cotton goods, metal goods, and wines. **Exports** : Cotton, silk, hides, and fish.

TONGKING : **Hanoi** (150) is the chief town, and **Haiphong** is the chief port. **Imports** : Metal goods and machinery, yarns. **Exports** : rice.

ANNAM : **Hué** is the capital. **Imports** : Cotton goods, tea, and petroleum. **Exports** : Sugar and cinnamon.

CAMBODIA : **Pnom-penh** (50) is the capital. **Imports** : Cotton goods, metal goods, and salt. **Exports** : Rice, cotton, and fish.

In **INDIA** the chief town is **Pondicherry**, which exports oil-seeds.

SIAM

This is really the basin of the Menam and a strip of the Malay Peninsula.

Bangkok (250), a large town on the Menam, is the capital.

PRODUCTS: Rice, fruits, timber, spices, pepper, tin. The chief imports are treasure, cotton goods, and opium. The chief exports are rice and teak.

PRONUNCIATION OF GEOGRAPHICAL NAMES

Key: bat, bāte, bār; met, mē; win, wīne; dot, dōte, möve

Baikal, bī'kāl
 Cinchona, sin-kō'na
 Godavari, gō-dā've-ri
 Hakodate, hā-kō-dā'te
 Hanoi, hā-nō'ē
 Kirghiz, kēr'gēz
 Kuen-lun, kwen-loon'
 Kerbela, ker-bā'lā
 Kiakhta, kē-āk'tā
 Kiusiu, kē-ō'sē-ō
 Karachi, ka-rā'chē
 Loess, les
 Maimachin, mi-mā'chēn
 Mitylene, mi-ti-lē'nē
 Mindanao, mēn-dā-nā'ō

Nejd, ned'jed
 Nagasaki, nā-gā-sā'kē
 Pamir, pā'mēr
 Peshawar, pe-shā'wer
 Pnom-penh, p'nom'pen
 Pondicherry, pon-di-she'rī
 Riu-kiu, rē-ō'kē-ō
 Stanovoi, stan'o-vō-ē
 Srinagar, srē'nā-gār
 Tian-shan, tē-an-shan'
 Tokio, tō'kē-ō
 Vindhya, vēn'dhyā
 Vladivostok, vlā-dē-vos'tok
 Yenisei, ye-nē-sā'ē
 Yablonoι, yāb-lō-nō'ē



